

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
525 W. ALLEGAN, LANSING, MI 48933

NOTICE OF CONTRACT NO. 071B5500131

between

THE STATE OF MICHIGAN

and

NAME & ADDRESS OF CONTRACTOR	PRIMARY CONTACT	EMAIL
Ernst & Young LLP 1101 New York Ave. NW Washington, DC 20005-4213	Daniel R. Mullins	Daniel.mullins@ey.com
	PHONE	VENDOR TAX ID # (LAST FOUR DIGITS ONLY)
	202-327-7287	5596

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
PROGRAM MANAGER	DTMB - CEPI	Thomas Howell	517-241-4376	howellt@michigan.gov
CONTRACT ADMINISTRATOR	DTMB	Jillian Yeates	517-284-7019	yeatesj@michigan.gov

CONTRACT SUMMARY

DESCRIPTION:

Center for Educational Performance and Information (CEPI) State Education Data Collection Cost Model

INITIAL TERM	EFFECTIVE DATE	INITIAL EXPIRATION DATE	AVAILABLE OPTIONS
3 Years	December 17 2015	December 16, 2018	2, 1 Year Options
PAYMENT TERMS	F.O.B.	SHIPPED TO	
NET45	N/A	N/A	

ALTERNATE PAYMENT OPTIONS	EXTENDED PURCHASING
<input type="checkbox"/> P-card <input type="checkbox"/> Direct Voucher (DV) <input type="checkbox"/> Other	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

MINIMUM DELIVERY REQUIREMENTS:

N/A

MISCELLANEOUS INFORMATION:

N/A

ESTIMATED CONTRACT VALUE AT TIME OF EXECUTION:	\$249,898.40
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For the Contractor:

**Andrew D. Phillips,
Contract Administrator
Ernst & Young LLP**

Date

For the State:

**Thomas Falik,
Services Director – DTMB Procurement
State of Michigan**

Date

**STATE OF MICHIGAN**

Contract No.071B5500131
State Education Data Collection Cost Model

**EXHIBIT A STATEMENT OF WORK
CONTRACT ACTIVITIES**

This exhibit identifies the anticipated requirements of Contract. The term “Contractor” in this document refers to Ernst & Young LLP.

Project Identification

This Contract is for financial consulting services to review and amend if necessary the existing cost models produced by the Center for Educational Performance and Information (CEPI) in its efforts to comply with legal requirements to quantify the necessary costs to the state for its education data collection activities with public schools pursuant to legal requirements as determined in the consolidated cases known as Adair vs. State of Michigan, Michigan Supreme Court docket numbers 137424 and 137453.

The Contractor must review the state cost models, recommend modifications or alternatives to those models where necessary, conduct necessary work to quantify resulting costs, prepare a written report to support the resulting methods and computations, and be prepared to defend the studies in court, if necessary.

Background

CEPI is a bureau within the State Budget Office, and the Department of Technology, Management and Budget that collects information from early childhood through postsecondary education institutions to comply with state and federal rules, helping schools secure funding, maintain accreditation, and reduce redundant reporting. Data collections gather information at the student level, classroom level, and school and district level, on elements ranging from achievement and assessment to school finance and safety. The state of Michigan has been gathering these necessary data from public school districts for decades. The methods used to gather that information have changed over time, and the tools used, and the details contained within those collections has changed as the business of education has evolved and advanced over the years. In 1979, the state was ordered by the courts to fund any newly mandated activity, or increased level of activity, that was mandated by the state on local units of government. That requirement has since been referred to as the “Headlee Law” which established the prohibition of unfunded mandates (POUM) by the state onto local units of government.

Over the years, school districts have successfully sued the state under the POUM provisions in law in *Durant vs State of Michigan* (1997 baseline year) and now under *Adair vs State of Michigan* (2010 ruling). In both cases, the courts ruled that the state violated the POUM and must establish appropriate cost reimbursement models to fund activities mandated by the state.

In fall 2010, CEPI leveraged internal resources and years of data collection knowledge and experience working with school districts statewide to quantify the cost to the state of producing the same data sets that were required under the law to be reported by the districts to CEPI. Those time studies and resulting computations are included as attachments to this statement of work (SOW) and will serve as a baseline for vendor activities conducted to validate, modify if necessary, and quantify on-going costs associated with this work.



Scope of Work

1.1 Requirements

Tier 1: Review of the Existing Methodology

1. The Contractor must initially review the time study work that preceded this Contract. The time studies are listed below:
 - a. Financial Information Database (FID) Time Study (Attachment A),
 - b. Michigan Student Data System (MSDS) Time Study (Attachment B),
 - c. Michigan Student Data System (MSDS) Unique Identification Code (UIC) Management Time Study (Attachment C),
 - d. Registry of Educational Personnel (REP) Time Study (Attachment D)
 - e. School Infrastructure Database (SID) Time Study (Attachment E)
2. The Contractor must gain an understanding of the work CEPI performs, how CEPI would acquire the necessary data if it were to do the data work itself, and determine appropriate costing models for use in quantifying costs associated with that work. This will include a review of the cost model work for the Michigan Student Data System (MSDS), the Unique Identification Code System (UIC), the Registry of Educational Personnel (REP), the Financial Information Database (FID) and the School Infrastructure Database (SID). Attention will be given to understanding the state work, reviewing corresponding documentation related to the state produced cost studies, and providing a detailed report on the quality and applicability of that work.
3. The Contractor must deliver a written report of the review to the Program Manager within 45 business/school days of the start of the engagement. The report will detail the cost study methodology, the outcomes of the state model review, and provide a comprehensive set of modifications, if necessary. The report will also lay out the costing model for each component of the CEPI data collection process for the current data collection year and will recommend the necessary costs for reimbursement to the public school districts of this state.

The Contractor's review of the approach would include the following for each of the FID, MSDS, UIC, REP and SID:

- I. Review of Existing Data – Data, record selection, district selection, etc. will be reviewed for technical and substantive appropriateness for cost estimation. Conclusions will be drawn on the robustness of current data.
- II. Review of Existing Cost Estimation – Incorporation of data into cost estimations will be reviewed to determine expected reasonableness and reliability of estimates. Reimbursement estimates will be statistically evaluated in comparison to student populations and sub-populations and district demographic characteristics.
- III. Mock-up Testing – A data entry terminal would be loaded with reporting software and anonymous sample records of varying complexity would be entered under controlled conditions by data entry personnel of varying skill. Elapsed time for data entry would be observed and the mean, median and variance across data entry personnel and record types would be identified
- IV. Field Testing – Actual data entry processes would be observed at three school districts of varying size (in a manner similar to that done by CEPI) to confirm and refine the Mock-up Testing and identify potentially omitted issues and possible scale factors
- V. Survey – A random, stratified (by full-time equivalent students population) survey of 90 Michigan school district will be performed (by email distributed with a link and unique ID to a secure survey website) in which respondents will identify the steps performed in data entry and log the time taken to complete those steps. The results of the survey will be used to review CEPI existing methods, refine time estimates and establish any existing scale relationships. This survey will also identify hourly compensation rate for data entry personnel to use in establishing a standard rate to apply to time estimates to estimate costs.
- VI. Cost/Compensation Analysis – Survey results from above will provide a foundation for compensation rate. This foundation will be modified by the degree to which workload would require the employment of additional staff for data entry and the implication of this employment for marginal compensation and



benefit levels. Compensation will be adjusted to market conditions and prevailing wages in the areas of the school district.

Tier 2: Implementation of Methodology Improvements (Optional)

1. After completion of Tier 1, if deemed necessary and upon mutual agreement, alternative strategies will be devised, documented and implemented by the Contractor.
2. Contractor is not guaranteed to do the work in Tier 2, contingent upon scope and budget.
3. The Contractor must complete the Implementation of Methodology Improvements within 30 days of being authorized to commence the work.

Tier 3: Expert Witness

The Contractor must be prepared to testify with respect to and defend the studies in court, if necessary.

1. As an expert witness for the State of Michigan, be prepared to describe the cost model used by the state, review/critique any reports that may be produced by litigants and/or their experts, and provide other consulting services such as: testifying at depositions, evidentiary hearings, and at trial; reviewing opposing expert witness reports and transcripts; and providing consultative services as requested by the Attorney General's designee(s).
2. Expert witness activities are based on time and reasonable travel expenses. The state does not reimburse for clerical/secretarial or other expenses. Due to the nature of the services, it is often difficult to estimate actual costs and the demand for services, so the magnitude and nature of any necessary support of this nature is indeterminable at this time.
3. Client is responsible for paying experts
4. A separate Expert Witness contract made in accordance with Attorney General's requirements will be needed if Contractor acts as the State's expert
5. Contractor may not act as expert for other side.

Tier 4: Update and Conduct the Study Annually

1. The Contractor must review any modifications to data study models with state staff on an annual basis.
2. The Contractor must apply those changes to their cost study.
3. The Contractor must conduct the study agreed upon with the Program Manager.
4. The Contractor must document and submit resulting report to the Program Manager by August 31 each year.

2. Acceptance

2.1 Acceptance, Inspection and Testing

The State will use the following criteria to determine acceptance of the Contract Activities:

1. Review and approval by the Program Manager of the final (Tier 1) report.
2. Completion of the deliverables in Tier 2, approved by Program Manager.
3. Serving as an expert witness in Tier 3.
4. Review and approval of the annual (Tier 4) report.

3. Staffing

3.1 Contractor Representative

The Contractor appoints the following Contractor Representative, specifically assigned to State of Michigan accounts, that will respond to State inquiries regarding the Contract Activities, answering questions related to ordering and delivery, etc. (the "Contractor Representative").

Daniel R. Mullins

The Contractor must notify the Contract Administrator at least 30 calendar days before removing or assigning a new Contractor Representative.

The Contractor Representative must be available for calls during the hours of 7 am to 6 pm EST.

3.2 Reserved

3.3 Reserved



3.4 Work Hours

The Contractor must provide Contract Activities during the State's normal working hours Monday – Friday 7:00 a.m. to 6:00 p.m. EST, and possible night and weekend hours depending on the requirements of the project.

3.5 Key Personnel

The Contractor appoints the following team of individuals who will be directly responsible for the day-to-day operations of the Contract ("Key Personnel"). Key Personnel must be specifically assigned to the State account, be knowledgeable on the contractual requirements, and respond to State inquiries within 1 business day.

**Daniel R Mullins Andrew D.
Phillips Joseph Callender Chad
Smith
Kevin P. Bloomfield**

Key Senior Personnel (described as senior team members in organizational chart) must have at least 10 years' experience in cost allocation, cost models, surveys, and similar work to the scope of this Statement of Work.

The State has approved the initial assignment. The State has the right to recommend and approve any proposed reassignment or replacement, of any Key Personnel. Before assigning an individual to any Key Personnel position, Contractor will notify the State of the proposed assignment, introduce the individual to the State's Project Manager, and provide the State with a resume and any other information about the individual reasonably requested by the State. The State reserves the right to interview the individual before granting written approval. In the event the State finds a proposed individual unacceptable, the State will provide a written explanation including reasonable detail outlining the reasons for the rejection.

Contractor will not remove any Key Personnel from their assigned roles on this Contract without the prior written consent of the State. The Contractor's removal of Key Personnel without the prior written consent of the State is an unauthorized removal ("**Unauthorized Removal**"). An Unauthorized Removal does not include replacing Key Personnel for reasons beyond the reasonable control of Contractor, including illness, disability, leave of absence, personal emergency circumstances, resignation, or for cause termination of the Key Personnel's employment. Any Unauthorized Removal may be considered by the State to be a material breach of this Contract, in respect of which the State may elect to terminate this Contract for cause under Termination for Cause in the Standard Terms.

It is further acknowledged that an Unauthorized Removal will interfere with the timely and proper completion of this Contract, to the loss and damage of the State, and that it would be impracticable and extremely difficult to fix the actual damage sustained by the State as a result of any Unauthorized Removal. Therefore, Contractor and the State agree that in the case of any Unauthorized Removal in respect of which the State does not elect to exercise its rights under Termination for Cause, Contractor will issue to the State the corresponding credits set forth below (each, an "Unauthorized Removal Credit"):

(i) For the Unauthorized Removal of any Key Personnel designated in the applicable Statement of Work, the credit amount will be \$5,000.00 per individual if Contractor identifies a replacement approved by the State and assigns the replacement to shadow the Key Personnel who is leaving for a period of at least 30 calendar days before the Key Personnel's removal.

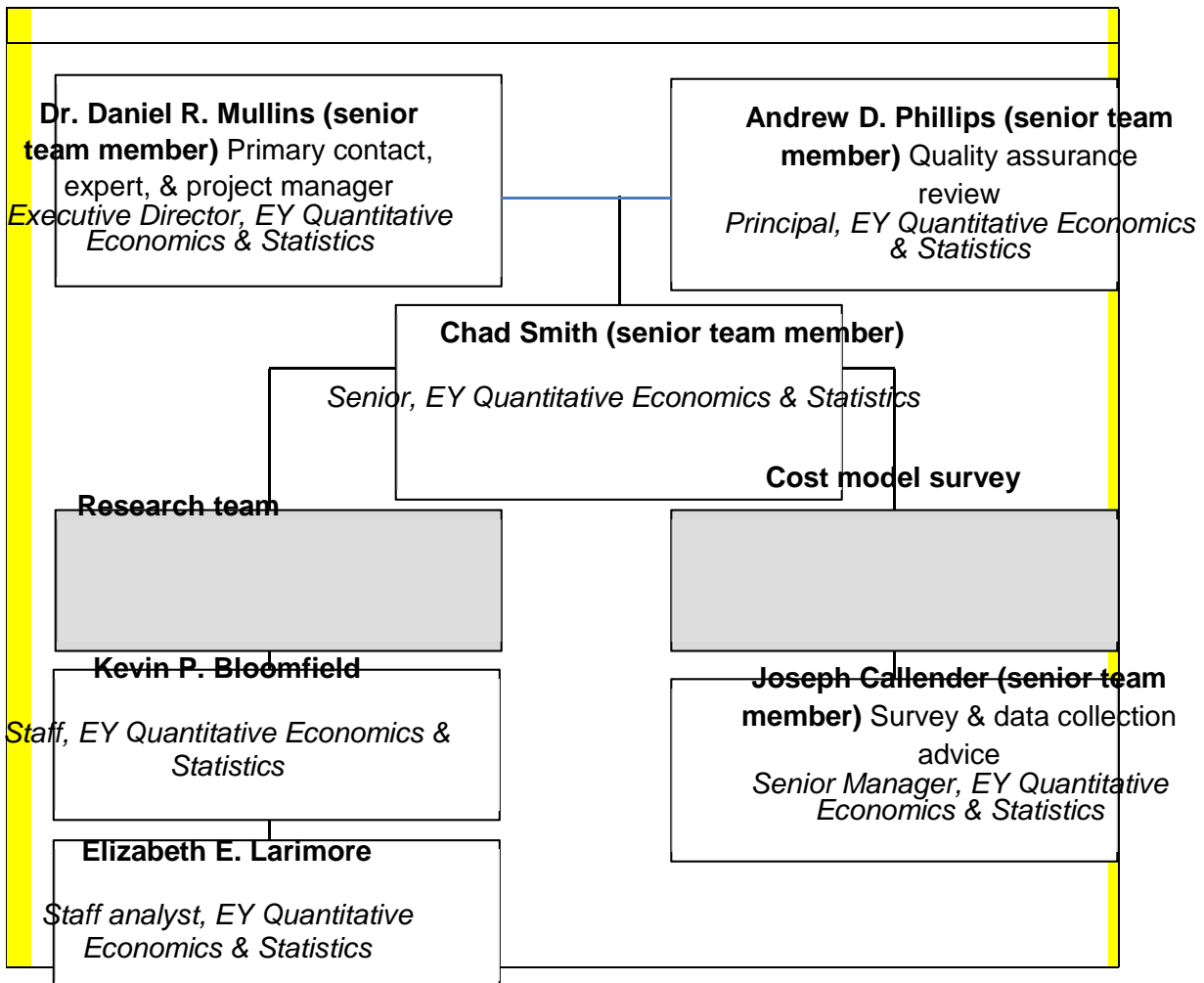


(ii) If Contractor fails to assign a replacement to shadow the removed Key Personnel for at least 30 calendar days, in addition to the \$5,000.00 credit specified above, Contractor will credit the State \$833.33 per calendar day for each day of the 30 calendar-day shadow period that the replacement Key Personnel does not shadow the removed Key Personnel, up to \$5,000.00 maximum per individual. The total Unauthorized Removal Credits that may be assessed per Unauthorized Removal and failure to provide 30 calendar days of shadowing will not exceed \$10,000.00 per individual.

Contractor acknowledges and agrees that each of the Unauthorized Removal Credits assessed above: (i) is a reasonable estimate of and compensation for the anticipated or actual harm to the State that may arise from the Unauthorized Removal, which would be impossible or very difficult to accurately estimate; and (ii) may, at the State's option, be credited or set off against any fees or other charges payable to Contractor under this Contract.

3.6 Organizational Chart

The Contractor must provide an overall organizational chart that details staff members, by name and title, and subcontractors.





3.7 Disclosure of Subcontractors

If the Contractor intends to utilize subcontractors, the Contractor must disclose the following:

The legal business name; address; telephone number; a description of subcontractor's organization and the services it will provide; and information concerning subcontractor's ability to provide the Contract Activities.

The relationship of the subcontractor to the Contractor.

Whether the Contractor has a previous working experience with the subcontractor. If yes, provide the details of that previous relationship.

A complete description of the Contract Activities that will be performed or provided by the subcontractor. Of the total bid, the price of the subcontractor's work.

4. Project Management

4.1 Project Plan

1. A draft project plan follows:

- a. Document / Process Review – day 1 & 2
- b. Data / Estimation Review – day 3 through 14
- c. Mock-up Testing – Day 3 through day 15
- d. Field Test / Review – Day 7 through 20
- e. Survey – Design Day 3 through 8; distribution day 9; return day 20; analysis completed day 25
- f. Final report – Day 20 through 45.

	Contract Activities	Staffing
Tier 1:	Review of Existing Methodology and Report	
		Mullins Phillips
		Callender <i>Smith</i>
		Bloomfield Larimore
		Equipment/Data Entry
		Personnel
		Survey Platform
		Mullins Phillips
		Callender <i>Smith</i>
Tier 2:	Implementing revised methodology	Bloomfield
	Adapting Existing Data Collection Adapting Existing Cost Estimation Method	
	Calculation of Cost/Compensation Entitlement for Each District	



Contract Activities	Staffing
Tier 4: Update and implement study annually Cost/Compensation Analysis -- Includes collection and entry of district relevant data, including case and reporting levels, student characteristics and economic/wage data. (Mock-up, Field Testing and Survey Elements only need to be updated in circumstances of a change in data entry requirements or change in technology. This estimate assumes that no changes exist)	Larimore
	Mullins Phillips
	Callender Smith
	Bloomfield Larimore

2. The Contractor must complete Tier 1 within 45 business days of the start of the Contract, Tier 2 must be complete within 30 days after CEPI approval.

4.2 Meetings

The Contractor must attend the following meetings during both Tier 1, Tier 2, and when completing work for Tier 4:

- Kick-Off Meeting (one or more EY team members in person)
- Weekly Status meeting or as required by the State (can be over phone)
- Final Meeting (in person)

The State may request other meetings, as it deems appropriate.

4.3 Reporting

The Contractor must deliver a written report of Tier 1's Review to the Program Manager within 45 business days of the start of the engagement. The report will detail the cost study methodology, the outcomes of the state model review, and provide a comprehensive set of modifications, if necessary. The report will also lay out the costing model for each component of the CEPI data collection process for the current data collection year and will recommend the necessary costs for reimbursement to the public school districts of this State.

5. Ordering

5.1 Authorizing Document

The appropriate authorizing document for the Contract will be purchase order.

6. Invoice and Payment

6.1 Invoice Requirements

All invoices submitted to the State must include: (a) date; (b) purchase order; (c) quantity; (d) description of the Contract Activities; (e) unit price; (f) shipping cost (if any); and (g) total price. Overtime, holiday pay, and travel expenses will not be paid.

6.2 Payment Methods

The State will make payment for Contract Activities in accordance to the below:

- Tier 1 – fixed price lump sum total authorized after acceptance criteria in Section 2.1 is met.
- Tier 2 – fixed price lump sum total authorized after acceptance criteria in Section 2.1 is met.
- Tier 3 – fixed hourly rate as expert witness is needed.
- Tier 4 – fixed price lump sum total authorized after acceptance criteria in Section 2.1 is met.



7. Reserved

8. Additional Requirements

8.1 Contractor cannot and does not provide any assurance that its work and findings will either support or contradict any particular position.

8.2 Failure to provide access to requested resources on the timeline requested by Contractor will result in delays in the project timeline.

8.3 Contractor will perform the Services in accordance with applicable professional standards, including those established by the American Institute of Certified Public Accountants ("AICPA"). From time to time, non- CPA personnel may perform the Services.

8.4 Contractor will not assume any of the State's management responsibilities in connection with the Services. Contractor will not be responsible for the use or implementation of the output of the Services, although Contractor may otherwise provide advice and recommendations to assist the State in the State's management functions and making decisions. The State shall assign a qualified person to oversee the Services. The State is responsible for all management decisions relating to the Services, the use or implementation of the output of the Services and for determining whether the Services are appropriate for the State's purposes.

8.5 The State shall provide (or cause others to provide) to Contractor, promptly, the information, resources and assistance (including access to records, systems, premises and people) that Contractor reasonably requires to perform the Services. To the best of the State's knowledge, all information provided by the State or on the State's behalf ("State Information") will be accurate and complete in all material respects. Contractor will rely on State Information made available to Contractor and, unless Contractor expressly agrees otherwise, will have no responsibility to evaluate or verify it. Failure to provide access to requested resources on the timeline requested by Contractor will result in delays in the project timeline.

8.6 The State may not rely on any draft Report. Contractor shall not be required to update any final Report for circumstances of which Contractor become aware, or events occurring, after its delivery except as specifically provided in the Statement of Work.

8.7 Contractor retains all intellectual property rights in any working papers compiled in connection with the Services (but not State Information reflected in them).



State Education Data Collection Cost Model

STATE OF MICHIGAN

Contract No. 071B5500131

EXHIBIT B - Reserved



State Education Data Collection Cost Model

EXHIBIT C PRICING***Tier 1: Review of the Existing Methodology and Report****Reimbursement will be based upon fixed price lump sum*

Staff Members	Estimate of Hours based on Project	Revised Hourly Rate	Revised Total Cost
Daniel R Mullins	68	\$476.00	\$32,368.00
Andrew D. Phillips	25	\$542.00	\$13,550.00
Joseph Callender	31	\$460.00	\$14,260.00
Chad Smith	129.84	\$290.00	\$37,653.60
Kevin P. Bloomfield	81	\$189.20	\$15,325.20
Elizabeth E. Larimore	68	\$151.60	\$10,308.80

Total for Tier 1: _\$123,465.60_ Tier 2:***Implementation of Methodology Improvements (Optional)****Reimbursement will be based upon fixed price lump sum*

Staff Members	Estimate of Hours to Implement Improvements	Revised Hourly Rate	Revised Total Cost
Daniel R Mullins	31	\$476.00	\$14,756.00
Andrew D. Phillips	10	\$542.00	\$5,420.00
Joseph Callender	11	\$460.00	\$5,060.00
Caroline M. Sallee	67.15862	\$290.00	\$19,476.00
Kevin P. Bloomfield	45	\$189.20	\$8,514.00
Elizabeth E. Larimore	43	\$151.60	\$6,518.80

Total for Tier 2: _\$59,744.80_

**Tier 3: Expert Witness**

Reimbursement will be based upon hourly rates; travel costs incurred under EY policy will be reimbursed separately and in accordance with the State rates.

Staff Members	Hourly Rate (1st Proposed)	Revised Hourly Rate
Daniel R Mullins	\$535.50	\$535.50
Andrew D. Phillips	\$609.75	\$609.75
Joseph Callender	\$517.50	\$517.50

Cost Allocated for services in Tier 3: \$30,000.00_

Tier 4: Update and Implement the Study Annually

Reimbursement will be based upon fixed price lump sum

Staff Members	Estimate of Hours based on Project	Revised Hourly	Revised Total Cost
Daniel R Mullins	15	\$476.00	\$7,140.00
Andrew D. Phillips	10	\$542.00	\$5,420.00
Joseph Callender	10	\$460.00	\$4,600.00
Chad Smith	37.31034	\$290.00	\$10,820.00
Kevin P. Bloomfield	30	\$189.20	\$5,676.00
Elizabeth E. Larimore	20	\$151.60	\$3,032.00

Cost for each annual evaluation in Tier 4: \$36,688.00_

Total for all Tiers: __\$249,898.40_



STATE OF MICHIGAN

STANDARD CONTRACT TERMS

This STANDARD CONTRACT ("**Contract**") is agreed to between the State of Michigan (the "**State**") and Ernst

& Young LLP ("**Contractor**"), a Delaware Limited Liability Partnership. This Contract is effective on December 17, 2015 ("**Effective Date**"), and unless terminated, expires on December 16, 2018.

This Contract may be renewed for up to two additional one year period(s). Renewal must be by written agreement of the parties and will automatically extend the Term of this Contract.

The parties agree as follows:

1. **Duties of Contractor.** Contractor must perform the services and provide the deliverables described in **Exhibit A – Statement of Work** (the "**Contract Activities**"). An obligation to provide delivery of any commodity is considered a service and is a Contract Activity.

Contractor must furnish all labor, equipment, materials, and supplies necessary for the performance of the Contract Activities, and meet operational standards, unless otherwise specified in Exhibit A.

Contractor must: (a) perform the Contract Activities in a timely, professional, safe, and workmanlike manner consistent with standards in the trade, profession, or industry; (b) meet or exceed the performance and operational standards, and specifications of the Contract; (c) provide all Contract Activities in good quality, with no material defects; (d) not interfere with the State's operations; (e) obtain and maintain all necessary licenses, permits or other authorizations necessary for the performance of the Contract; (f) cooperate with the State, including the State's quality assurance personnel, and any third party to achieve the objectives of the Contract; (g) return to the State any State-furnished equipment or other resources in the same condition as when provided when no longer required for the Contract; (h) not make any media releases without prior written authorization from the State; (i) assign to the State any claims resulting from state or federal antitrust violations to the extent that those violations concern materials or services supplied by third parties toward fulfillment of the Contract; (j) adhere to all relevant State physical and IT security policies and standards' requirements which will be made available upon request; and (k) provide the State priority in performance of the Contract except as mandated by federal disaster response requirements. Any breach under this paragraph is considered a material breach.

Contractor must also be clearly identifiable while on State property by wearing identification issued by the State, and clearly identify themselves whenever making contact with the State.

2. **Notices.** All notices and other communications required or permitted under this Contract must be in writing and will be considered given and received: (a) when verified by written receipt if sent by courier; (b) when actually received if sent by mail without verification of receipt; or (c) when verified by automated receipt or electronic logs if sent by facsimile or email.

If to State:	If to Contractor:
<i>Jillian Yeates</i>	<i>Dr. Daniel R. Mullins</i>
If to State:	If to Contractor:



*Constitution Hall
525 W. Allegan, 1st Floor Lansing,
MI 48933
YeatesJ@michigan.gov (517)
284-7019*

*Executive Director, Quantitative Economies &
Statistics, National Director, State & Local Tax
Policy Economics
1101 New York Ave.
NW Washington, DC 20005-4213,
Daniel.Mullins@EY.com
202-327-7287*

3. **Contract Administrator.** The Contract Administrator for each party is the only person authorized to modify any terms and conditions of this Contract (each a "**Contract Administrator**"):

State:	Contractor:
<i>Jillian Yeates Constitution Hall 525 W. Allegan, 1st Floor Lansing, MI 48933 YeatesJ@michigan.gov v (517) 284-7019</i>	<i>Andrew D. Phillips Partner/Principal, Quantitative Economics & Statistics 1101 New York Ave. NW Washington, DC 20005-4213, Andrew.Phillips@ey.com 202-327-7815</i>

4. **Program Manager.** The Program Manager for each party will monitor and coordinate the day-to-day activities of the Contract (each a "**Program Manager**"):

State:	I Contractor:
<i>Thomas Howell Library of Michigan 702 West Kalamazoo Street Lansing, MI 48915 HowellT@michigan.gov v (517) 241-4376</i>	<i>Dr. Daniel R. Mullins Executive Director, Quantitative Economies & Statistics, National Director, State & Local Tax Policy Economics 1101 New York Ave. NW Washington, DC</i>

5. **Performance Guarantee.** Contractor must at all times have financial resources sufficient, in the opinion of the State, to be able to perform the Contract.
6. **Insurance Requirements.** Contractor must maintain the insurances identified below and is responsible for all deductibles. All required insurance must: (a) protect the State from claims that may arise out of, are alleged to arise out of, or result from Contractor's or a subcontractor's performance; (b) be primary and non-contributing to any comparable liability insurance (including self-insurance) carried by the State; and (c) be provided by an company with an A.M. Best rating of "A" or better and a financial size of VII or better.



Insurance Type	Additional Requirements
Commercial General Liability Insurance	
<u>Minimal Limits:</u> \$1,000,000 Each Occurrence Limit \$1,000,000 Personal & Advertising Injury Limit \$2,000,000 General Aggregate Limit \$2,000,000 Products/Completed Operations <u>Deductible Maximum:</u> \$50,000 Each Occurrence	Contractor must have their policy endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds using endorsement CG 20 10 11 85, or both CG 2010 07 04 and CG 2037 07 0. Coverage must not have exclusions or limitations related to sexual abuse and molestation liability.
Umbrella or Excess Liability Insurance	
<u>Minimal Limits:</u> \$5,000,000 General Aggregate	Contractor must have their policy endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds.
Automobile Liability Insurance	
<u>Minimal Limits:</u> \$1,000,000 Per Occurrence	
Workers' Compensation Insurance	
<u>Minimal Limits:</u> Coverage according to applicable laws governing work activities.	Waiver of subrogation, except where waiver is prohibited by law.

Insurance Type	Additional Requirements
Employers Liability Insurance	
<u>Minimal Limits:</u> \$500,000 Each Accident \$500,000 Each Employee by Disease \$500,000 Aggregate Disease.	

If any of the required policies provide **claim-made** coverage, the Contractor must: (a) provide coverage with a retroactive date before the effective date of the contract or the beginning of Contract Activities; (b) maintain coverage and provide evidence of coverage for at least three (3) years after completion of the Contract Activities; and (c) if coverage is canceled or not renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective date, Contractor must purchase extended reporting coverage for a minimum of three (3) years after completion of work.



Contractor must: (a) provide insurance certificates to the Contract Administrator, containing the agreement or purchase order number, at Contract formation and within 20 calendar days after the expiration date of the applicable policies; (b) require that subcontractors maintain the required insurances contained in this Section; (c) notify the Contract Administrator within 5 business days if any insurance is cancelled; and (d) waive all rights against the State for damages covered by insurance to the extent of the insurance limits when Contractor is negligent in causing the loss. Failure to maintain the required insurance does not limit this waiver.

This Section is not intended to and is not be construed in any manner as waiving, restricting or limiting the liability of either party for any obligations under this Contract (including any provisions hereof requiring Contractor to indemnify, defend and hold harmless the State).

7. Reserved

8. Reserved

- 9. Independent Contractor.** Contractor is an independent contractor and assumes all rights, obligations and liabilities set forth in this Contract. Contractor, its employees, and agents will not be considered employees of the State. No partnership or joint venture relationship is created by virtue of this Contract. Contractor, and not the State, is responsible for the payment of wages, benefits and taxes of Contractor's employees and any subcontractors. Prior performance does not modify Contractor's status as an independent contractor. Contractor hereby acknowledges that the State is and will be the sole and exclusive owner of all right, title, and interest in the Contract Activities and all associated intellectual property rights, if any. Such Contract Activities are works made for hire as defined in Section 101 of the Copyright Act of 1976. To the extent any Contract Activities and related intellectual property do not qualify as works made for hire under the Copyright Act, Contractor will, and hereby does, immediately on its creation, assign, transfer and otherwise convey to the State, irrevocably and in perpetuity, throughout the universe, all right, title and interest in and to the Contract Activities, including all intellectual property rights therein.
- 10. Subcontracting.** Contractor may not delegate any of its obligations under the Contract without the prior written approval of the State. Contractor must notify the State at least 90 calendar days before the proposed delegation, and provide the State any information it requests to determine whether the delegation is in its best interest. If approved, Contractor must: (a) be the sole point of contact regarding all contractual matters, including payment and charges for all Contract Activities; (b) make all payments to the subcontractor; and (c) incorporate the terms and conditions contained in this Contract in any subcontract with a subcontractor. Contractor remains responsible for the completion of the Contract Activities, compliance with the terms of this Contract, and the acts and omissions of the subcontractor. The State, in its sole discretion, may require the replacement of any subcontractor.
- 11. Staffing.** The State's Contract Administrator may require Contractor to remove or reassign personnel by providing a notice to Contractor. However, if the request is not based upon violation of the terms of this Contract or the SOW by such personnel, then such request will constitute a waiver of any claim related to a delay by Contractor caused by personnel related issue in the performance of the Services.
- 12. Background Checks.** Upon request, Contractor must perform background checks on all employees and subcontractors and its employees prior to their assignment. The scope is at the discretion of the State and documentation must be provided as requested. Contractor is responsible for all costs associated with the requested background checks. The State, in its sole discretion, may also perform background checks.
- 13. Assignment.** Neither party may assign this Contract to any other party without the prior approval of the other party; provided, however, that the State may assign this Contract to any other State agency, department or division without the prior consent of Contractor.



14. **Change of Control.** Contractor will notify, at least 90 calendar days before the effective date, the State of a change in Contractor's organizational structure or ownership. For purposes of this Contract, a change in control means any of the following: (a) a sale of more than 50% of Contractor's stock; (b) a sale of substantially all of Contractor's assets; (c) a change in a majority of Contractor's board members; (d) consummation of a merger or consolidation of Contractor with any other entity; (e) a change in ownership through a transaction or series of transactions; (f) or the board (or the stockholders) approves a plan of complete liquidation. A change of control does not include any consolidation or merger effected exclusively to change the domicile of Contractor, or any transaction or series of transactions principally for bona fide equity financing purposes.

In the event of a change of control, Contractor must require the successor to assume this Contract and all of its obligations under this Contract.

15. **Ordering.** Contractor is not authorized to begin performance until receipt of authorization as identified in Exhibit A.
16. **Reserved**
17. **Reserved**
18. **Reserved**
19. **Reserved**

20. **Terms of Payment.** Invoices must conform to the requirements communicated from time-to-time by the State.

All undisputed amounts are payable within 45 days of the State's receipt. Contractor may only charge for Contract Activities performed as specified in Exhibit A. Invoices must include an itemized statement of all charges. The State is exempt from State sales tax for direct purchases and may be exempt from federal excise tax, if Services purchased under this Agreement are for the State's exclusive use. Notwithstanding the foregoing, all prices are inclusive of taxes, and Contractor is responsible for all sales, use and excise taxes, and any other similar taxes, duties and charges of any kind imposed by any federal, state, or local governmental entity on any amounts payable by the State under this Contract.

The State has the right to withhold payment of any disputed amounts until the parties agree as to the validity of the disputed amount. The State will notify Contractor of any dispute within a reasonable time. Payment by the State will not constitute a waiver of any rights as to Contractor's continuing obligations, including claims for deficiencies or substandard Contract Activities. Contractor's acceptance of final payment by the State constitutes a waiver of all claims by Contractor against the State for payment under this Contract, other than those claims previously filed in writing on a timely basis and still disputed.

The State will only disburse payments under this Contract through Electronic Funds Transfer (EFT). Contractor must register with the State at <http://www.michigan.gov/cpexpress> to receive electronic fund transfer payments. If Contractor does not register, the State is not liable for failure to provide payment.

Without prejudice to any other right or remedy it may have, the State reserves the right to set off at any time any amount then due and owing to it by Contractor against any amount payable by the State to Contractor under this Contract.

21. **Liquidated Damages.** Liquidated damages, if applicable, will be assessed as described in Exhibit A.
22. **Stop Work Order.** The State may suspend any or all activities under the Contract at any time. The State will provide Contractor a written stop work order detailing the suspension. Contractor must comply with the stop work order upon receipt. Within 90 calendar days, or any longer period agreed to by Contractor, the State will either: (a) issue a notice authorizing Contractor to resume work, or (b) terminate the Contract



or purchase order. The State will not pay for Contract Activities, Contractor's lost profits, or any additional compensation during a stop work period.

23. **Termination for Cause.** The State may terminate this Contract for cause, in whole or in part, if Contractor, as determined by the State: (a) endangers the value, integrity, or security of any location, data, or personnel; (b) becomes insolvent, petitions for bankruptcy court proceedings, or has an involuntary bankruptcy proceeding filed against it by any creditor; (c) engages in any conduct that may expose the State to liability; (d) breaches any of its material duties or obligations; or (e) fails to cure a breach within the time stated in a notice of breach. Any reference to specific breaches being material breaches within this Contract will not be construed to mean that other breaches are not material.

If the State terminates this Contract under this Section, the State will issue a termination notice specifying whether Contractor must: (a) cease performance immediately, or (b) continue to perform for a specified period. If it is later determined that Contractor was not in breach of the Contract, the termination will be deemed to have been a Termination for Convenience, effective as of the same date, and the rights and obligations of the parties will be limited to those provided in Section 24, Termination for Convenience.

The State will only pay for amounts due to Contractor for Contract Activities accepted by the State on or before the date of termination, subject to the State's right to set off any amounts owed by the Contractor for the State's reasonable costs in terminating this Contract. The Contractor must pay all reasonable costs incurred by the State in terminating this Contract for cause including administrative costs, transition costs, and any costs the State incurs to procure the Contract Activities from other sources, subject to the limitation of liability set forth in Section 28.

24. **Termination for Convenience.** The State may immediately terminate this Contract in whole or in part without penalty and for any reason with 15 calendar days prior written notice, including but not limited to, appropriation or budget shortfalls. The termination notice will specify whether Contractor must: (a) cease performance of the Contract Activities immediately, or (b) continue to perform the Contract Activities in accordance with Section 25, Transition Responsibilities. If the State terminates this Contract for convenience, the State will pay for completed and accepted work, all work in progress and all reasonable costs, as determined by the State, for State approved Transition Responsibilities. Contractor may terminate the Contract if it is legally or professionally obligated to, by giving the State 30 calendar days prior written notice (or such lesser notice as may be required to comply with its legal and professional obligations).
25. **Transition Responsibilities.** Upon termination or expiration of this Contract for any reason, Contractor must, for a period of time specified by the State (not to exceed 90 calendar days), provide all reasonable transition assistance requested by the State, to allow for the expired or terminated portion of the Contract Activities to continue without interruption or adverse effect, and to facilitate the orderly transfer of such Contract Activities to the State or its designees. Such transition assistance may include, but is not limited to: (a) continuing to perform the Contract Activities at the established Contract rates; (b) taking all reasonable and necessary measures to transition performance of the work, including all applicable Contract Activities, training, equipment, software, leases, reports and other documentation, to the State or the State's designee; (c) taking all necessary and appropriate steps, or such other action as the State may direct, to preserve, maintain, protect, or return to the State all materials, data, property, and confidential information provided directly or indirectly to Contractor by any entity, agent, vendor, or employee of the State; (d) transferring title in and delivering to the State, at the State's discretion, all completed or partially completed deliverables prepared under this Contract as of the Contract termination date; and (e) preparing an accurate accounting from which the State and Contractor may reconcile all outstanding accounts (collectively, "**Transition Responsibilities**"). This Contract will automatically be extended through the end of the transition period.
26. **Indemnification.** Contractor must defend, indemnify and hold the State, its departments, divisions, agencies, offices, commissions, officers, and employees harmless, without limitation, from and against any and all actions, claims, losses, liabilities, damages, costs, attorney fees, and expenses (including those required to establish the right to indemnification), arising out of or relating to: (a) any infringement,



misappropriation, or other violation of any intellectual property right or other right of any third party in connections with any Service or Deliverables provided under the Statement of Work; and (b) any bodily injury, death, or damage to real or tangible personal property occurring to the extent due to action or inaction by Contractor (or any of Contractor's employees, agents, subcontractors, or by anyone else for whose acts any of them may be liable).

The State will notify Contractor in writing if indemnification is sought; however, failure to do so will not relieve Contractor, except to the extent that Contractor is materially prejudiced. Contractor must, to the reasonable satisfaction of the State, demonstrate its financial ability to carry out these obligations.

The State is entitled to: (i) regular updates on proceeding status; (ii) participate in the defense of the proceeding;

(iii) employ its own counsel at its own expense to assist in the handling of the claim and to monitor and advise the State about the status and progress of the defense; and to (iv) to the extent that any principles of Michigan

governmental or public law may be involved or challenged, the State has the right, at its own expense, to retain

control of the defense of that portion of the claim involving the principles of Michigan governmental or public law Contractor will not, without the State's written consent (not to be unreasonably withheld), settle, compromise, or

consent to the entry of any judgment in or otherwise seek to terminate any claim, action, or proceeding. To the extent that any State employee, official, or law may be involved or challenged, the State may, at its own expense, control the defense of that portion of the claim.

Any litigation activity on behalf of the State, or any of its subdivisions under this Section, must be coordinated with the Department of Attorney General. An attorney designated to represent the State may not do so until approved by the Michigan Attorney General and appointed as a Special Assistant Attorney General.

27. **Infringement Remedies.** If, in either party's opinion, any piece of equipment, software, commodity, or service supplied by Contractor or its subcontractors, or its operation, use or reproduction. is likely to become the subject of a copyright, patent, trademark, or trade secret infringement claim, Contractor must, at its expense: (a) procure for the State the right to continue using the equipment, software, commodity, or service, or if this option is not reasonably available to Contractor, (b) replace or modify the same so that it becomes non-infringing; or (c) accept its return by the State with appropriate credits to the State against Contractor's charges and reimburse the State for any losses or costs incurred as a consequence of the State ceasing its use and returning it.

Notwithstanding the preceding paragraph of this Section 27, Contractor will have no liability or obligation regarding infringement arising solely from (a) use of equipment, software, commodity, or service in a manner other than its intended use as reflected in the applicable SOW, (b) Contractor's compliance with any designs, specifications, or instructions of the State, (c) modifications to equipment, software, commodity, or service by the State without the prior knowledge and approval of Contractor, or (d) the State's failure to use modifications or enhancements made available at no cost to the State by Contractor, provided Contractor has given the State written notice and such modification or enhancement will not negatively impact the equipment, software, commodity, or service.

28. **Limitation of Liability.**

- a. **Disclaimer of Damages.** Neither party will be liable, regardless of the form of action, whether in contract, tort, negligence, strict liability or by statute or otherwise, for any claim related to or arising under this Contract for consequential, incidental, indirect, punitive or special damages, including without limitation lost profits and lost business opportunities.
- b. **Limitation of Liability.** In no event will either party's aggregate liability to the other party under this Contract, regardless of the form of action, whether in contract, tort, negligence, strict liability or by statute or otherwise, for any claim related to or arising under this Contract, exceed the



maximum amounts of fees specified in the Statement of Work.

- c. Exceptions. Subsections (a) (Disclaimer of Damages) and (b) (Limitation of Liability) above, shall not apply to:
 - i. Contractor's obligation to indemnify under Section 26 of this Contract;
 - ii. Contractor's obligations under Section 31 of this Contract (State Data), subject to the Security Breach Indemnity Cap; and
 - iii. Damages arising from either party's recklessness, bad faith, or intentional misconduct.
- d. Contractor is a member of the global network of Ernst & Young firms ("EY Firms"), each of which is a separate legal entity. The State may not make a claim or bring proceedings relating to the Services or otherwise under this Agreement against any other EY Firm or Contractor's or its subcontractors, members, shareholders, directors, officers, partners, principals or employees ("EY Persons"). However, the preceding sentence will not limit the ability of the State to pursue injunctive relief against EY Persons that provided Services on this Contract if the State would otherwise be entitled to do so. The State shall make any claim or bring proceedings only against Contractor. The provisions of this Section 28 are intended to benefit the other EY Firms and all EY Persons, who shall be entitled to enforce them.
 - i. Contractor must notify and identify to the State Contract Administrator the entity before any such involvement with the Contract takes place.

29. **Disclosure of Litigation, or Other Proceeding.** Contractor must notify the State within 14 calendar days of receiving notice of any litigation, investigation, arbitration, or other proceeding (collectively, "**Proceeding**") involving Contractor, a subcontractor, or an officer or director of Contractor or subcontractor, that arises during the term of the Contract, including: (a) a criminal Proceeding; (b) a parole or probation Proceeding; (c) a Proceeding under the Sarbanes-Oxley Act; (d) a civil Proceeding involving: (1) a claim that might reasonably be expected to adversely affect Contractor's viability or financial stability; or (2) a governmental or public entity's claim or written allegation of fraud; or (e) a Proceeding involving any license that Contractor is required to possess in order to perform under this Contract.

30. **Reserved**

31. **State Data.**

- a. Ownership. The State's data ("**State Data**," which will be treated by Contractor as Confidential Information) includes the following, to the extent the following is provided to the Contractor under this Contract: (a) the State's data collected, used, processed, stored, or generated as the result of the Contract Activities; (b) personally identifiable information ("**PII**") collected, used, processed, stored, or generated as the result of the Contract Activities, including, without limitation, any information that identifies an individual, such as an individual's social security number or other government-issued identification number, date of birth, address, telephone number, biometric data, mother's maiden name, email address, credit card information, or an individual's name in combination with any other of the elements here listed; and, (c) personal health information ("**PHI**") collected, used, processed, stored, or generated as the result of the Contract Activities, which is defined under the Health Insurance Portability and Accountability Act (HIPAA) and its related rules and regulations. State Data is and will remain the sole and exclusive property of the State and all right, title, and interest in the same is reserved by the State. This Section survives the termination of this Contract.
- b. Contractor Use of State Data. Contractor is provided a limited license to State Data for the sole and exclusive purpose of providing the Contract Activities and as permitted under this Contract, including a license to collect, process, store, generate, and display State Data only to the extent necessary in the provision of the Contract Activities. Contractor must: (a) keep and maintain State Data in confidence, using such degree of care as is appropriate and consistent with its obligations as further described in this Contract and applicable law to avoid unauthorized access, use, disclosure, or loss; (b) use and disclose State Data solely and exclusively for the purpose of providing the Contract Activities, such use and disclosure being in accordance with this Contract,



any applicable Statement of Work, and applicable law; and (c) not use, sell, rent, transfer, distribute, or otherwise disclose or make available State Data for Contractor's own purposes or for the benefit of anyone other than the State without the State's prior written consent. This Section survives the termination of this Contract.

- c. Extraction of State Data. Contractor must, within five (5) business days of the State's request, provide the State, without charge and without any conditions or contingencies whatsoever (including but not limited to the payment of any fees due to Contractor), an extract of the State Data in the format specified by the State.
- d. Backup and Recovery of State Data. Unless otherwise specified in Exhibit A, Contractor is responsible for maintaining a backup of State Data and for an orderly and timely recovery of such data. Unless otherwise described in Exhibit A, Contractor must maintain a contemporaneous backup of State Data that can be recovered within two (2) hours at any point in time.
- e. Loss of Data. In the event of any act, error or omission, negligence, misconduct, or breach that compromises or is suspected to compromise the security, confidentiality, or integrity of State Data or the physical, technical, administrative, or organizational safeguards put in place by Contractor that relate to the protection of the security, confidentiality, or integrity of State Data, Contractor must, as applicable:
 - (a) notify the State as soon as practicable but no later than seventy-two hours of becoming aware of such occurrence; (b) cooperate with the State in investigating the occurrence, including making available all relevant records, extracts of logs, files, data reporting, and other materials required to comply with applicable law or as otherwise required by the State; (c) in the case of PII or PHI, at the State's sole election, (i) notify the affected individuals who comprise the PII or PHI as soon as practicable but no later than is required to comply with applicable law, or, in the absence of any legally required notification period, within 5 calendar days of the occurrence; or (ii) reimburse the State for any costs in notifying the affected individuals; (d) in the case of PII, provide third-party credit and identity monitoring services to each of the affected individuals who comprise the PII for the period required to comply with applicable law, or, in the absence of any legally required monitoring services, for no less than twenty-four (24) months following the date of notification to such individuals; (e) perform or take any other actions required to comply with applicable law as a result of the occurrence; (f) without limiting Contractor's obligations of indemnification as further described in this Contract, indemnify, defend, and hold harmless the State for any and all claims, including reasonable attorneys' fees, costs, and expenses incidental thereto, which may be suffered by, accrued against, charged to, or recoverable from the State in connection with the Contractor's breach of this Section; (g) be responsible for recreating lost State Data that should be in Contractor's possession in the manner and on the schedule set by the State without charge to the State (State is responsible for data not provided to Contractor per Section 31.a); and, (h) provide to the State a detailed plan within 10 calendar days of the occurrence describing the measures Contractor will undertake to prevent a future occurrence. Notification to affected individuals, as described above, must comply with applicable law, be written in plain language, and contain, at a minimum: name and contact information of Contractor's representative; a description of the nature of the loss; a list of the types of data involved; the known or approximate date of the loss; how such loss may affect the affected individual; what steps Contractor has taken to protect the affected individual; what steps the affected individual can take to protect himself or herself; contact information for major credit card reporting agencies; and, information regarding the credit and identity monitoring services to be provided by Contractor. Notwithstanding anything to the contrary set forth in this Section or any other provisions of this Contract, the aggregate liability of Contractor for damages under this Section shall not exceed the greater of Five Million Dollars (\$5,000,000.00) or the maximum amount of Fees specified in the Statement of Work (the "Security Breach Indemnity Cap"). This Section survives the termination or expiration of this Contract for so long as Contractor has possession, custody or control of State data.

32. **Non-Disclosure of Confidential Information.** The parties acknowledge that each party may be exposed to or acquire communication or data of the other party that is confidential, privileged communication not intended to be disclosed to third parties. The provisions of this Section survive the termination of this Contract.

- a. Meaning of Confidential Information. For the purposes of this Contract, the term "**Confidential**



Information” means all information and documentation of a party that: (a) has been marked “confidential” or with words of similar meaning, at the time of disclosure by such party; (b) if disclosed orally or not marked “confidential” or with words of similar meaning, was subsequently summarized in writing by the disclosing party and marked “confidential” or with words of similar meaning; and, (c) should reasonably be recognized as confidential information of the disclosing party. The term “Confidential Information” does not include any information or documentation that was: (a) subject to disclosure under the Michigan Freedom of Information Act (FOIA); (b) already in the possession of the receiving party without an obligation of confidentiality; (c) developed independently by the receiving party, as demonstrated by the receiving party, without violating the disclosing party’s proprietary rights; (d) obtained from a source other than the disclosing party without an obligation of confidentiality; or, (e) publicly available when received, or thereafter became publicly available (other than through any unauthorized disclosure by, through, or on behalf of, the receiving party). For purposes of this Contract, in all cases and for all matters, State Data is deemed to be Confidential Information.

- b. Obligation of Confidentiality. The parties agree to hold all Confidential Information in confidence and not to copy, reproduce, sell, transfer, or otherwise dispose of, give or disclose such Confidential Information to third parties other than the employees, partners, principals, agents, or subcontractors of a party who have a need to have access in connection with this Contract or to use such Confidential Information for any purposes whatsoever other than the performance of this Contract. The parties agree to advise and require their respective employees, agents, and subcontractors of their obligations to keep all Confidential Information confidential. Disclosure to a subcontractor is permissible where: (a) use of a subcontractor is authorized under this Contract; (b) the disclosure is necessary or otherwise naturally occurs in connection with work that is within the subcontractor's responsibilities; and (c) Contractor obligates the subcontractor in a written contract to maintain the State's Confidential Information in confidence. If Contractor notifies the State of a legal obligation to disclose confidential information, and the State provides written consent, the Contractor may disclose such confidential information to a third party. Further, the parties may disclose confidential information in accordance to the terms of the applicable SOW.
- c. Cooperation to Prevent Disclosure of Confidential Information. Each party must use its best efforts to assist the other party in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limiting the foregoing, each party must advise the other party promptly within seventy-two hours in the event either party learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Contract and each party will cooperate with the other party in seeking injunctive or other equitable relief against any such person.
- d. Remedies for Breach of Obligation of Confidentiality. Each party acknowledges that breach of its obligation of confidentiality may give rise to irreparable injury to the other party, which damage may be inadequately compensable in the form of monetary damages. Accordingly, a party may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies which may be available, to include, in the case of the State, at the sole election of the State, the immediate termination, without liability to the State, of this Contract or any Statement of Work corresponding to the breach or threatened breach.
- e. Surrender of Confidential Information upon Termination. Upon termination of this Contract or a Statement of Work, in whole or in part, each party must, within 5 calendar days from the date of termination, return to the other party any and all Confidential Information received from the other party, or created or received by a party on behalf of the other party, which are in such party's possession, custody, or control; provided, however, that Contractor must return State Data to the State following the timeframe and procedure described further in this Contract. Should Contractor or the State determine that the return of any non-State Data Confidential Information is not feasible, such party must destroy the non-State Data Confidential Information and must certify the same in writing within 5 calendar days from the date of termination to the other party.



Contractor may retain its working papers, copies of work products prepared by it, and Contractor may retain encrypted data backups maintained in confidentiality at a bonded 3rd party for up to one year, in accordance with the requirements of this Contractor. The final written report provided in Exhibit A - Statement of Work, Section 1.1 (Requirements), Tier 1, Section 1 is not Confidential Information.

33. Data Privacy and Information Security.

- a. Undertaking by Contractor. Without limiting Contractor's obligation of confidentiality as further described, Contractor is responsible for establishing and maintaining a data privacy and information security program, including physical, technical, administrative, and organizational safeguards, that is designed to: (a) maintain the security and confidentiality of the State Data; (b) protect against any anticipated threats or hazards to the security or integrity of the State Data; (c) protect against unauthorized disclosure, access to, or use of the State Data; (d) provide for the proper disposal of State Data; and (e) require that all employees, agents, and subcontractors of Contractor, if any, comply with all of the foregoing. In no case will the safeguards of Contractor's data privacy and information security program be less stringent than the safeguards used by the State, and Contractor' must at all times meet the requirements of all applicable State IT policies and standards' requirements, which safeguards, policies and standards are at http://www.michigan.gov/dtmb/0,4568,7-150-56355_56579_56755---,00.html.
- b. Reserved.
- c. Right of Audit by the State. Without limiting any other audit rights of the State, the State has the right to review Contractor's data privacy and information security program prior to the commencement of Contract Activities and from time to time during the term of this Contract with 15 days prior written notice. During the providing of the Contract Activities, on an ongoing basis from time to time and without notice, the State, at its own expense, is entitled to perform, or to have performed, an on-site review of Contractor's data privacy and information security program. In lieu of an on-site review, upon request by the State, Contractor agrees to complete, within 60 calendar days of receipt, an audit questionnaire provided by the State regarding Contractor's data privacy and information security program. To the extent the State uses a third party auditor, the State will not use a direct competitor of the Contractor, unless it is unreasonable not to.
- d. Audit Findings. Contractor must implement any required safeguards as identified by any audit of Contractor's data privacy and information security program.
- e. State's Right to Termination for Deficiencies. The State reserves the right, at its sole election, to immediately terminate this Contract or a Statement of Work without limitation and without liability if the State determines that Contractor fails or has failed to meet its obligations under this Section.



34. **Reserved**

35. **Reserved**

36. **Records Maintenance, Inspection, Examination, and Audit.** The State or its designee (who may not be a competitor of Contractor) may audit Contractor to verify compliance with this Contract. No audit will involve access to Contractor's systems or require Contractor to provide any information or take any steps that would cause Contractor to violate its confidentiality obligations to any other client. Contractor must retain, and provide to the State or its designee and the auditor general upon request, all financial and accounting records related to the Contract through the term of the Contract and for 4 years after the latter of termination, expiration, or final payment under this Contract or any extension ("**Audit Period**"). If an audit, litigation, or other action involving the records is initiated before the end of the Audit Period, Contractor must retain the records until all issues are resolved.

Within 10 calendar days of providing notice, the State and its authorized representatives or designees have the right to enter and inspect Contractor's premises or any other places where Contract Activities are being performed, and examine, copy, and audit all records related to this Contract. Contractor must cooperate and provide reasonable assistance. If any financial errors are revealed, the amount in error must be reflected as a credit or debit on subsequent invoices until the amount is paid or refunded. Any remaining balance at the end of the Contract must be paid or refunded within 45 calendar days.

This Section applies to Contractor, any parent, affiliate, or subsidiary organization of Contractor, and any subcontractor that performs Contract Activities in connection with this Contract.

37. **Warranties and Representations.** Contractor represents and warrants: (a) Contractor is the owner or licensee of any Contract Activities that it licenses, sells, or develops and Contractor has the rights necessary to convey title, ownership rights, or licensed use; (b) all Contract Activities are delivered free from any security interest, lien, or encumbrance and will continue in that respect; (c) the Contract Activities will not infringe the patent, trademark, copyright, trade secret, or other proprietary rights of any third party; (d) the Contract Activities are merchantable and fit for the specific purposes identified in the Contract; (e) the Contract signatory has the authority to enter into this Contract; (f) all information furnished by Contractor in connection with the Contract fairly and accurately represents Contractor's business, properties, finances, and operations as of the dates covered by the information, and Contractor will inform the State of any material adverse changes; and (g) all information furnished and representations made in connection with the award of this Contract are true, accurate, and complete, and contains no false statements or omits any fact that would make the information misleading. A breach of this Section is considered a material breach of this Contract, which entitles the State to terminate this Contract under Section 23, Termination for Cause.

38. **Conflicts and Ethics.** Contractor will uphold high ethical standards and is prohibited from: (a) holding or acquiring an interest that would conflict with this Contract; (b) doing anything that creates an appearance of impropriety with respect to the award or performance of the Contract; (c) attempting to influence or appearing to influence any State employee by the direct or indirect offer of anything of value; or (d) paying or agreeing to pay any person, other than employees and consultants working for Contractor, any consideration contingent upon the award of the Contract. Contractor must promptly notify the State within seventy-two hours of any violation or potential violation of these standards. This Section applies to Contractor, any parent, affiliate, or subsidiary organization of Contractor, and any subcontractor that performs Contract Activities in connection with this Contract.

39. **Compliance with Laws.** Contractor must comply with all applicable federal, state and local laws, rules and regulations in connection with this Contract.

40. **Reserved**



41. **Nondiscrimination.** Under the Elliott-Larsen Civil Rights Act, 1976 PA 453, MCL 37.2101, *et seq.*, and the Persons with Disabilities Civil Rights Act, 1976 PA 220, MCL 37.1101, *et seq.*, Contractor and its subcontractors agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, marital status, or mental or physical disability. Breach of this covenant is a material breach of this Contract.
42. **Unfair Labor Practice.** Under MCL 423.324, the State may void any Contract with a Contractor or subcontractor who appears on the Unfair Labor Practice register compiled under MCL 423.322.
43. **Governing Law.** This Contract is governed, construed, and enforced in accordance with Michigan law, excluding choice-of-law principles, and all claims relating to or arising out of this Contract are governed by Michigan law, excluding choice-of-law principles. Any dispute arising from this Contract must be resolved in Michigan Court of Claims. Contractor consents to venue in Ingham County, and waives any objections, such as lack of personal jurisdiction or *forum non conveniens*. Contractor must appoint agents in Michigan to receive service of process.
44. **Non-Exclusivity.** Nothing contained in this Contract is intended nor will be construed as creating any requirements contract with Contractor. This Contract does not restrict the State or its agencies from acquiring similar, equal, or like Contract Activities from other sources.
45. **Force Majeure.** Neither party will be in breach of this Contract because of any failure arising from any disaster or acts of god that are beyond their control and without their fault or negligence. Each party will use commercially reasonable efforts to resume performance. Contractor will not be relieved of a breach or delay caused by its subcontractors. If immediate performance is necessary to ensure public health and safety, the State may immediately contract with a third party.
46. **Dispute Resolution.** The parties will endeavor to resolve any Contract dispute in accordance with this provision. The dispute will be referred to the parties' respective Contract Administrators or Program Managers. Such referral must include a description of the issues and all supporting documentation. The parties must submit the dispute to a senior executive if unable to resolve the dispute within 15 business days. The parties will continue performing while a dispute is being resolved, unless the dispute precludes performance. A dispute involving payment does not preclude performance.

Litigation to resolve the dispute will not be instituted until after the dispute has been elevated to the parties' senior executive and either concludes that resolution is unlikely, or fails to respond within 15 business days. The parties are not prohibited from instituting formal proceedings: (a) to avoid the expiration of statute of limitations period; (b) to preserve a superior position with respect to creditors; or (c) where a party makes a determination that a temporary restraining order or other injunctive relief is the only adequate remedy. This Section does not limit the State's right to terminate the Contract.
47. **Media Releases.** News releases (including promotional literature and commercial advertisements) pertaining to the Contract or project to which it relates must not be made without prior written State approval, and then only in accordance with the explicit written instructions of the State. The State will make reasonable best efforts to notify Contractor and receive review from Contractor when mentioning Contractor in news releases.
48. **Website Incorporation.** The State is not bound by any content on Contractor's website unless expressly incorporated directly into this Contract.
49. **Order of Precedence.** In the event of a conflict between the terms and conditions of the Contract, the exhibits, a purchase order, or an amendment, the order of precedence is: (a) the purchase order; (b) the amendment; (c) Exhibit A; (d) any other exhibits; and (e) the Contract.



50. **Severability.** If any part of this Contract is held invalid or unenforceable, by any court of competent jurisdiction, that part will be deemed deleted from this Contract and the severed part will be replaced by agreed upon language that achieves the same or similar objectives. The remaining Contract will continue in full force and effect.
51. **Waiver.** Failure to enforce any provision of this Contract will not constitute a waiver.
52. **Survival.** The provisions of this Contract that impose continuing obligations, including warranties and representations, termination, transition, insurance coverage, indemnification, and confidentiality, will survive the expiration or termination of this Contract.
53. **Entire Contract and Modification.** This Contract is the entire agreement and replaces all previous agreements between the parties for the Contract Activities. This Contract may not be amended except by signed agreement between the parties (a “**Contract Change Notice**”).



Attachment A
Financial Information Database
Data Submission Time Study

Previous to the Financial Information Database (FID), school districts were required to manually compile data from their local financial information systems in order to provide ending balances and amounts in specific rolled-up categories to the state. Beginning with the 2003-2004 school year collection, the FID allowed districts to extract their ending financial balances and amounts directly from their financial software system and provide them to the state without the need to aggregate, manipulate or amend them in any way. The FID system takes the locally provided figures and aggregates them to determine the categorical amounts needed for federal reporting.

Staff members from the Center for Educational Performance and Information (CEPI) completed a Data Submission Time Study for the Financial Information Database submission process for the purpose of determining the average length of time required to hand enter the data elements collected through the FID. Although current financial software allows a very easy method for extracting these balances electronically into files that represent the balance sheet, revenue, and expenditure files, the state assumes in this study that the districts will use a less efficient process of manual data entry to complete the reporting task.

It is assumed that individuals entering the data prior to the beginning of the time study were already an authorized user of the FID, were at least somewhat familiar with the application, had a basic understanding of the various customer support materials concerning the application, and had access to all the pertinent financial statements.

The school district chosen for the Data Submission Time Study was Alpena Public Schools (04010). The district was selected because their data file submissions contain more than the average number of records per file. The detail contained in the expenditure file far exceeded the current minimum reporting level of the object code (second position is required, third position is provided by Alpena). In addition to the expanded object and state code detail, the file is further broke down into instructional expenditures for eleven different building codes (as opposed to fewer than 10 for most districts).

When the time study occurred, Alpena had begun but not fully completed submission of the 2010-2011 data. The detail was consistent as in years past and it was important to utilize the same district as the previous study to show change over time. The expenditure file that Alpena originally provided contained the entity codes for two buildings that closed over the previous school year. These codes were replaced with the 00000 code and the associated function code changed to one that does not require a building code. Normally, the district would already have made these changes and summed the data to the minimal reporting level at the 00000 code. The result is the test file contains more records than Alpena's final file likely will contain.

The time required to perform the initial data entry for each file is contained within Table 1 below. Data entry occurred between October 14 and October 20, 2011. It should be noted that time includes only entry. Time was stopped when the coder was required to answer phone, respond to e-mail or other interruption.

**Table 1**

	Record Count	Time (hours, minutes, seconds)	Average Per Record
Time to enter balance sheet.	89	0:12:28	0:00:08
Time to enter revenue file.	59	0:11:17	0:00:10
Time to enter portion of expenditure file.	1,559	6:11:47	0:00:14
Time to hand enter data files	1,717	6:36:53	0:00:14
Completed data entry screen	0	0:01:20	
Time to hand enter with data entry screen		6:36:53	

After performing the initial data entry process, record counts in the system were compared against the original record counts from the input files and verified to match. The three files were then uploaded and processed in under two minutes. Upon initial upload, four errors were generated in the expenditure file that were the result of data coder error. These errors were identified, corrected and the amended file uploaded to the application.

Table 2 below provides a summary of the primary activities involved in the financial data submission and the time spent performing each.

Table 2

Activity Description	Records	Time
Modified closed building codes	49	0:01:18
Initial data entry	1,717	6:36:53
Key in data entry screen in application		0:01:20
Upload files for first time		0:00:37
Identify/correct errors received (includes uploading)		0:03:31
Total time for data submission		6:42:39

Estimated hours based on district size (for local estimation of compensation level)

The average record count based on a review of transactions loaded into the 2011 FID:

Balance Sheet	40
Revenue	50
Expenditure	915

Average calculation was restricted to district files in submitted or accepted (not submitted but free of errors) status as 4:00 p.m. on October 24, 2011.

The 2010 State Compensation Tables show that a Senior Data Coding Operating employed by the State of Michigan would cost \$17.54 per hour (plus benefits cost). We have chosen to fund the work according to the Department of Technology, Management and Budget Advisory



Memorandum Number 2012-1 using the cost of an information technology programmer/analyst who would bill out at \$63.91 per hour. This rate includes an hourly rate, insurances, FICA and retirement costs. By applying the average time used to key each file in the study, an estimate can be calculated on the amount of hours necessary for a small, medium and large district to key in the financial data. The average time for keying was applied to the number of districts uploaded for three districts for the 2011 collection:

Table 3

State Averages	Records	Average Per Rec	Time	Comp. Per Hour	Total
Balance Sheet	40	0:00:08	0:05:36	\$ 63.91	\$5.97
Revenue	50	0:00:10	0:08:11	\$ 63.91	\$8.71
Expenditure	915	0:00:14	3:38:12	\$ 63.91	\$232.42
Total			3:51:59	\$ 63.91	\$247.11

Alcona (01010)	Records	Average Per Rec	Time	Comp. Per Hour	Total Cost
Balance Sheet	37	0:00:08	0:04:56	\$ 63.91	\$5.25
Revenue	35	0:00:10	0:05:50	\$ 63.91	\$6.21
Expenditure	260	0:00:14	1:00:40	\$ 63.91	\$64.62
Total			1:11:26		\$76.09

Plainwell (03010)	Records	Average Per Rec	Time	Comp. Per Hour	Total Cost
Balance Sheet	51	0:00:08	0:06:48	\$ 63.91	\$7.24
Revenue	52	0:00:10	0:08:40	\$ 63.91	\$9.23
Expenditure	728	0:00:14	2:49:52	\$ 63.91	\$180.94
Total			3:05:20		\$197.41

Grand Rapids (41010)	Records	Average Per Rec	Time	Comp. Per Hour	Total Cost
Balance Sheet	83	0:00:08	0:11:04	\$ 63.91	\$11.79
Revenue	71	0:00:10	0:11:50	\$ 63.91	\$12.60
Expenditure	9,616	0:00:14	13:23:44	\$ 63.91	\$2,389.95
Total			37:46:38		\$2,414.34



Total Cost for data entry if completed by the State of Michigan

Based on the results of this time study, a cost of collecting data through the Financial Information Database can be estimated by taking the record counts of submitted files from the 2010 collection and applying the average time to key per record times the compensation rate of a state of Michigan employed as an information technology programmer/analyst. The result is a state cost of \$150,446.41.

Table 4

File Type	Records	Average Per Rec	Time	Comp. Per	Total Cost
Balance Sheet	30,472	0:00:08	71:10:04	\$63.91	\$4,548.34
Revenue	35,827	0:00:10	97:42:08	\$63.91	\$6,244.14
Expenditure	549,791	0:00:14	2185:09:56	\$63.91	\$139,653.93
Totals	616,090		2354:02:08		\$150,446.41

It is important to note in considering these calculations that in many cases the files submitted by the school districts in 2010 contained fewer details than the case study files used, and as a result, the actual cost would likely have been lower than what is presented in this costing model. Calculating the cost that will be incurred by districts by moving to the third position of the object code in addition to the reporting of the state code is accounted for in this study.



Attachment B
**Michigan Student Data System
2011-2012 Data Submission Time Study**

Staff members from the Center for Educational Performance and Information completed a Data Submission Time Study for the Michigan Student Data System (MSDS). This study considered the data entry for the required certified data collections reported through the MSDS.

Assumptions

The following assumptions were made regarding the district staff that would be entering student data through the MSDS:

1. Current authorized user of the MSDS.
2. Basic knowledge of the MSDS and its functionality
3. Basic knowledge of the MSDS characteristics and definitions available through published resource materials, including:
 - a. MSDS District User Training Manual
 - b. MSDS Collection Details Manual
4. Access to the student's local records to compare to student history
5. All required data on the student is readily available
6. All data submitted for each collection are accurate and meet the defined schema and business rules

Methodology

CEPI staff members were timed by an observer while entering data online through the MSDS user interface for each of the required certified collections at both a novice and intermediate level. To approximate access to local student records, data sets were developed and printed out for the testers to use. This timing methodology was standardized across CEPI collections (MSDS, REP, SID).

Timing began at the point the tester logged into the MSDS application and was stopped when the tester clicked the "submit" button to complete the record entry. Timings for the certification process were conducted separately and are provided in Table 12.

Characteristics that would not be directly entered by a district user (i.e. system generated or pre-populated data) were not included in the sample data used for all time tests.

School Year 2010-2011 Collections

The total number of records submitted through the required certified collections in MSDS for 2010-2011 were used in our calculations. This included the following student data collections:

- Fall General (fall membership count)
- Spring General (supplemental membership count)
- End of Year General
- Early Childhood
- Teacher Student Data Link

Collections that were optional, not certified or were established to provide district users the ability to update their student data are not included in this study. In addition, the Special Education Child Count (3WiN) and Supplemental Nutrition Eligibility (SNE) collections have been excluded from this study as they have been retired for the 2011-2012 school year.



General Collections

Data reported through the Fall 2010, Spring 2011 and EOY 2011 General collections were analyzed to determine the number and complexity of student records submitted. Although only nineteen to twenty characteristics are required to be submitted on a student (depending upon the time of year), we instead looked at the average number of characteristics reported for a student for the timing student. The average number of characteristics reported in a record for the lower quartile of all submissions was used as the basis for defining a simple record, and the average number of characteristics reported for the upper quartile of all collections defined a complex record.

Simple record: 27 characteristics
Complex record: 30 characteristics

All sample files included the five required components and their required characteristics necessary to submit general collection records. Details are provided in the Appendix.

Table 1: Fall 2011 General Collection Data Entry Test Times			
Tester	Average Data Entry Time (minutes)		
	Simple (A)	Complex (B)	Overall Average (C)
Novice (1)	3.16	3.19	3.18
Intermediate (2)	1.94	2.06	2.00
Average	2.55	2.63	2.59
Time used in cost estimates (4): (rounded to the next quarter minute)	2.75 minutes		

Table 2: 2010-2011 General Collection Certified Records		
Collection Period	Total Records (A)	Number of Districts Reporting (B)
Fall 2010 (1)	1,783,542	848*
Spring 2011 (2)	1,742,245	847
End-of-Year 2011 (3)	1,709,098	847
Totals used in cost estimates (4):	5,234,885	847

*One district submitted records in the Fall collection but did not submit in the Spring or EOY collections because they merged with another district.

Estimated total data entry time for the 2011-2012 general collections are shown in the table below:

**Table 3: Estimated Data Entry Time 2011-2012 General Collections**

	Collection Period	Estimated	Average Data	Estimated Data Entry
		Records Submitted (A)	Entry Time Per Record (B) (in minutes)	Time (C) (rounded to the next hour)
2011 (1)	Fall			
(using Fall 2010 actual numbers)		1,783,542	2.75	81,746
Spring 2012 (2)	Spring			
(using Spring 2011 actual numbers)		1,742,245	2.75	79,853
End-of-Year 2012 (3)	End-of-Year			
(using EOY 2011 actual numbers)		1,709,098	2.75	78,334
Totals used in cost estimates (4):		5,234,885	2.75 minutes	239,933 hours

Early Childhood Collection

The Early Childhood Collection allows the submission of data for nine different programs, however only two are required: the Great Start Readiness Program (GSRP) and the Great Parents Great Start (GPGS) program. For the purposes of this timing study, we assumed that a simple record included the minimum of one required program; however a complex record could include both required and optional programs.

Simple record: one early childhood program; 18-20 distinct characteristics

Complex record: four early childhood programs, Supplemental Nutritional Eligibility and LEP data; 46-50 distinct characteristics.

Table 4: Fall 2011 Early Childhood Data Entry Test Times			
Tester	Average Data Entry Time (minutes)		
	Simple (A)	Complex (B)	Overall Average (C)
Novice (1)	3.00	6.33	4.50
Intermediate (2)	1.78	3.62	2.70
Average	2.39	4.98	3.60
Time used in cost estimates (4): (rounded to the next quarter minute)			3.75 minutes

There were four data snap-shot points for the 2010-2011 Early Childhood Collection. Because there was a large number of records submitted that were optional or duplicates of previously submitted data, we have deduplicated our record counts based on student (UIC), fiscal entity and program for the 2010-2011 school year.

There will be three separate collection windows for the 2011-2012 early childhood program year; therefore we have applied a multiplier of three to estimate the number of records that will be submitted through the early childhood collections.

**Table 5: 2010-2011 Early Childhood Collection Certified Records**

Program Type	Deduplicated Count (A)	Multiplier (B)	Estimated Total	Number of Districts
			Records (C)	Reporting (D)
Great Start Readiness Program (1)	22,438	x3	67,314	
Great Parents Great Start (2)	7,766	x3	23,298	
Totals used in cost estimates (4):	30,204	90,612	446	

Table 6: Estimated Data Entry Time for 2011-2012 Early Childhood Collections

Record Type	Estimated Records Submitted (A)	Average Data Entry Time Per Record (B) (in minutes)	Estimated Data Entry Time (C) (rounded to the next hour)
2011-2012 Early Childhood (1)			
(Table 5, column C, row 4)	90,612	3.75	5,664
Totals used in cost estimates (3):	90,612	3.75	5,664 hours

Teacher Student Data Link Collection

The Teacher Student Data Link (TSDL) Collection was submitted by districts for the first time in the 2010-2011 school year.

Analysis of all certified records reported through TSDL determined that there was a significant difference in the number of courses reported for elementary and secondary students. Therefore, we have completed estimates for each level separately. The average number of characteristics reported in a record for the lower quartile of all submissions was used as the basis for defining a simple record, and the average number of characteristics reported for the upper quartile of all collections defined a complex record.

Elementary Simple: 1 course
Simple: 8 courses

Elementary Complex: 11 courses
Secondary Complex: 14 courses

Table 7: TSDL Collection Data Entry Test Times - Elementary & Ungraded Spec. Ed.			
Tester	Average Data Entry Time (minutes)		
	Simple (A)	Complex (B)	Overall Average (C)
Novice (1)	2.71	9.96	6.34
Intermediate (2)	2.19	7.28	4.73
Average (3)	2.45	8.62	5.53
Time used in cost estimates (4): (rounded to the next quarter minute)			5.75 minutes

**Table 8: TSDL Collection Data Entry Test Times - Secondary**

Tester	Average Data Entry Time (minutes)		
	Simple (A)	Complex (B)	Overall (C)
Novice (1)	9.33	11.67	10.50
Intermediate (2)	5.62	8.55	7.09
Average (3)	7.47	10.11	8.79
Time used in cost estimates (4): (rounded to the next quarter minute)			9.00 minutes

Table 9: 2010-2011 TSDL Collection Certified Records

Record Type	Total Records (A)	Number of Districts Reporting (B)
Elementary & Ungraded Special Education (1)	1,084,409	
Secondary (2)	531,101	
Totals (3):	1,618,510	829

2,638 records submitted through TSDL for early childhood students have been excluded from this total. Early childhood records were not required for this collection but were allowed to accommodate districts that include early childhood records in the same student information system as kindergarten through high school students.

Table 10: Estimated Data Entry Time 2011-2012 TSDL Collection

Record Type	Estimated Records Submitted (A)	Average Data Entry Time Per Record (B) (in minutes)	Estimated Data Entry Time (C) (rounded to the next hour)
Elementary & Ungraded Spec. Ed. (1)			
(using 2010-2011 actual numbers)	1,084,409	5.75	103,923
Secondary Education (2)			
(using 2010-2011 actual numbers)	531,101	9.00	79,666
Totals used in cost estimates (3):	1,615,510	n/a	183,589 hours

Time Estimates for Submitting Student Data Via File Upload

Our study focused on the manual entry of student data for each collection. We recognize that it is unlikely that most districts will submit their data in this manner and will instead submit by uploading a data extract file from districts' local student information system (SIS) directly to the MSDS, as it is a more efficient and accurate method for the submission of data. The process of creating a data extract file varies depending upon the vendor chosen by the district for their SIS. Based on prior consultation with an experienced former local district user, we have applied a



multiplier of ten to provide for off-line data preparation, (i.e., create, perform XML file validation, save, and upload) and rounded our time appraisals up to the next hour. The projected data entry time for the 2011-2012 school year required collections are shown in Table 11:

Table 11: Estimated File Upload Time for 2011-2012 Student Data Collections			
2011-2012 Required Collections	Time (A)	Submitting Districts (B)	Total (C)
Fall, Spring & End-of-Year General Collections (1) $[(3 \times 10) \times 10] \div 60$	5 hours	847	4,235 hours
Fall, Spring & End-of-Program Early Childhood Collections (2) $[(3 \times 10) \times 10] \div 60$	5 hours	446	2,230 hours
Teacher Student Data Link Collection (3) $[(1 \times 10) \times 10] \div 60$	2 hours	829	1,658 hours
Total Projected Data Upload Time for all 2011-2012 Collections (4):			8,123 hours

To provide the most generous time allowance, we used the manual data entry method for all of our cost estimates.

Quality Review and Certification

The Quality Review and Certification process begins once a user has submitted all applicable student records into the MSDS collection staging area, completed all necessary UIC resolution and corrected any record level errors. Selecting the "Quality Review" option initiates a complete system review of all records for compliance with the collection business rules and comparison to historical data. The user is instructed not to close the browser or navigate away from the MSDS page until the system has completed this process. Once the Quality Review is finished the system provides the user with the option to certify their collection as accurate and complete. This requires the user to confirm that they are ready to certify, click on the "Certification" button and then approve the certification. Although the district user is not required to complete any tasks during the system processing time, and is likewise not prevented from completing other work while waiting, we have included this time in our cost estimate.

Through analysis of the certified data, we determined the average number of records submitted by a district and the number of districts reporting for each collection during the 2010-2011 school year. The timing tests for the Quality Review and Certification process were completed using files that contained no less than the average file sizes shown in Table 12.

**Table 12: 2010-2011 Collection Statistics**

Collection	Average Number of Records Certified per District(A)	Number of Districts Reporting (B)
General Collection (1)	2,059	847
Early Childhood Collection (2)	207	446
Teacher Student Data Link (3)	1,273	829

CEPI testers were timed from when they clicked the "Quality Review" button on the Staging Area Details page in MSDS through the moment they clicked the "Approve" button for certification. This included processing times as previously detailed.

System infrastructure and processing improvements made during the 2010-2011 school year have dramatically reduced the time to complete the quality review and certification process for collections. However, processing time is impacted by the total amount of data stored in the MSDS staging area and the number of other files processing at the time the user starts the quality review process. At its peak level of use and data in staging, it is estimated that the completion time may take three to four times longer than the averages found during testing. Therefore, we have applied a multiplier of four to the averages and rounded up to the next quarter minute for our calculations.

Table 13: Quality Review and Certification Timings

2010-2011 Collections	Average Quality Review and Certification Time (A)	Multiplier (B)	Adjusted Quality Review and Certification Time (C)
General Collection (1)	0.58 x 4		2.33
Early Childhood Collection (2)	0.52 x 4		2.07
Teacher Student Data Link Collection (3)	0.57 x 4		2.27
Time applied to all cost estimates (4): (rounded to the next quarter minute)			2.50 minutes

Table 14: Estimated Quality Review and Certification Times for the 2011-2011 Collections

Collection	Number of Collections for 2011-2012	Adjusted Average Quality Review and Certification Time (in minutes)	Number of Districts Reporting in 2010-2011	Estimated Quality Review and Certification Time (C) (in hours)
General Collections (1)	3	2.5	847	106
Early Childhood Collections (2)	3	2.5	446	56
TSDL Collection (3)	1	2.5	829	35
Total Estimated Quality Review and Certification Time (4): (rounded to the next hour)				197 hours



Estimated Local Effort for 2011-2012 Student Data Submission

Table 15: Estimated Local Effort for 2011-2012 Required Student Data Reporting

2011-2012 Required Collections	Data Entry (A)	Quality Review and Certification (B)	Estimated Local Effort (C)
General Collections (1)	239,933	106	240,039
Early Childhood Collections (2)	5,664	56	5,720
TSDL Collection (3)	183,589	35	183,624
Total 2011-2012 Estimated Local Effort (4):			429,383
			<i>(rounded to the next hour)</i> hours

Summary

The 2010 State Compensation Tables show that a Data Coding Operator-A8 (senior) employed by the State of Michigan would cost \$17.54 per hour (plus benefits cost). We have chosen to fund the work according to the Department of Technology, Management and Budget Advisory Memorandum Number 2012-1 using the cost of an Information Technology Programmer/ Analyst-12 who would bill out at \$63.91 per hour. This amount includes an hourly rate, insurances, FICA and retirement costs. By applying this amount to the total preparation and data entry hours quantified in the study, an estimate can be calculated on the amount of funding necessary to support the acquisition and reporting of the state issued unique identification code (UIC) annually. The amount recommended for the 2011-12 school year is **\$27,441,869** as detailed in Table 16.

Table 16: Estimated Data Entry Costs for 2011-2012 Required Student Data Reporting

2011-2012 Required Collections	Local Effort	Rate	Estimated Cost <i>(rounded to the next dollar)</i>
Fall, Spring & End-of-Year General <i>(Table 15, column C, row 1)</i>	240,039 hours	\$63.91	\$15,340,893
Early Childhood <i>(Table 16, column C, row 2)</i>	5,720 hours	\$63.91	\$365,566
Teacher Student Data Link <i>(Table 16, column C, row 2)</i>	183,624 hours	\$63.91	\$11,735,410
Total 2011-2012 Student Data Submission Cost Estimate:			\$27,441,869



Appendix: Characteristics Included in Time Studies

General Collection

- Enrollment – *Date of Enrollment, District Exit Status*
- Membership – *Date of Count, Student Residency, 10/30 Day Rule*
- Personal Core – *Last Name, First Name, Date of Birth, Gender, UIC*
- Personal Demographic – *Resident LEA, Street Address, City, State, ZIP Code, Racial/Ethnic Code*
- School Demographics – *Operating District, School Facility Number, Grade or Setting*

The remaining characteristics used in the simple and complex records were comprised of a combination of the following components and their required characteristics:

- General Ed FTE – *General Ed FTE*
- Attendance – *Days Attended, Total Possible Attendance*
- Advanced Accelerated – *Program Model, Special Program Options*
- Homeless Demographics – *Homeless, Unaccompanied Youth*
- SNE – *Supplemental Nutrition Eligibility*
- Program Participation – *Program Eligibility Participation*
- Title I TAS – *TAS Instructional Services , TAS Support Services*
- Special Education – *Primary Disability, IEP Date, Support Services, Program Service Code, Primary Educational Setting, Placed by Another District IEP, Section 52 FTE*

Early Childhood Collection

- Early Childhood Programs – *Fiscal Entity Type Code, Fiscal Entity Code, School Facility Number*, EC Program, EC Program Start Date, EC Delivery Method, EC Delivery Schedule**
- Personal Core – *Last Name, First Name, Date of Birth, Gender, UIC*
- Personal Demographics – *Resident LEA, Resident County, Street Address, City, State, ZIP Code, Racial/Ethnic Code*
- LEP – *LEP Funding Participation, LEP Instructional Program, Home Language*
- SNE – *Supplemental Nutrition Eligibility*

Teacher Student Data Link Collection

- Personal Core – *Last Name, First Name, Date of Birth, Gender, UIC*
- School Demographics – *Operating District, School Facility Number, Grade or Setting*
- Student Course – *Subject Area Code, Course Identifier Code, Local Course ID, Local Course Title, Course Section ID, Course Type, Academic year, Credits Granted, Course Grade, Completion Status, PIC, Virtual Delivery, Mentor Teacher*



Attachment C
Michigan Student Data System
2011-2012 Unique Identification Code Management
Data Submission Time Study

Staff members from the Center for Educational Performance and Information completed a Data Submission Time Study for the Michigan Student Data System (MSDS). This study considered both the management of unique identification codes (UICs) for students and the data entry for the required certified data collections reported through the MSDS.

Unique Identification Code Management

Various scenarios were tested to gain an understanding of the amount of time it takes district users to manage the UIC process. The following assumptions were made regarding the district users that are responsible for entering the data:

1. Current authorized user of the MSDS.
2. Basic knowledge of the MSDS and its functionality
3. Basic knowledge of the MSDS characteristics and definitions available through published resource materials, including:
 - a. MSDS District User Training Manual
 - b. MSDS Collection Details Manual
4. Access to the student's local records to compare to student history
5. All required data on the student is readily available since it is required to legally enroll the student in the district

CEPI staff members were timed while conducting the various tasks involved with managing UICs. To approximate both novice and intermediate district users, the testers had varying levels of MSDS knowledge and experience in entering MSDS data. A novice level user was considered someone familiar with the MSDS application and its functions, but has limited experience with the assigned tasks or scenarios. An intermediate level user was identified as someone who has an in-depth understanding of the application and more experience with the assigned tasks or scenarios. None of the testers used in this study have the primary or lead responsibility for the tasks or scenarios assigned to them. To approximate access to local student records, data sets were developed and printed for the testers to use. The methodologies for completion of the tasks were established and various scenarios were timed by an observer.

The following scenarios were tested:

1. **Student Search:** This was a basic search in the MSDS to find a UIC for a student; this is the type of search that a district would do when looking up a UIC for a new student. Time was included for the user to write the UIC information on to a separate document.
2. **Student Search with common name:** This was a search for a student that had a common name and used multiple filter steps to establish a matching student and find the UIC. Time was included for the user to write the UIC information on to a separate document.
3. **Request New UIC:** When a student's UIC is not found by doing the student search, the district user would then request a new UIC. This test goes through the process of adding the student to a collection in order to request the new UIC. Time was included for the user to write the UIC information on to a separate document.
4. **UIC Resolution:** When there are possible matches for a student and the MSDS cannot determine a single exact match or determine if a new UIC is required, users must



resolve to a record. They may either select which UIC to use, or request a new UIC. Time was included for the user to write the UIC information on to a separate document. We did not include the time needed to request a new UIC as that task was timed in scenario 3.

5. **Request to Link UICs:** As part of data cleansing by district users, they may submit linking requests when there are multiple UICs found for the same student. This ensures a clean longitudinal record.
6. **Request to link Multiple UICs:** In some cases, a student may have multiple UICs; this process is a more complex linking request.

Scenarios 1-4 included the time necessary for the user to write by hand the UIC information on a paper ledger. In the following sections we will discuss the time estimation for saving this information electronically.

The average results for both intermediate and novice users are reported in table one.

Table 1

Participant Level	Simple Student Search (A)	Student Search – Common Name (B)	Request new UIC (C)	UIC Resolution (D)	Request to Link UIC (E)	Request to Link Multiple UICs (F)
Intermediate (1)	0:26	0:37	2:56	1:13	1:06	1:55
Novice (2)	0:39	0:39	4:29	1:29	1:13	2:12
Time applied to all cost estimates (3)	0.75 minutes	0.75 minutes	3.75 minutes	1.5 minutes	1.25 minutes	2.25 minutes

For the purposes of our cost estimation, we will use the highest average time and round up to the next quarter minute. Based on the timed data entries, a basic student search to find an existing UIC for a student takes approximately the same amount of time regardless of the complexity of the search and the frequency of the student name within the data base.

It should be noted that for both the novice and the intermediate user tests, the users did take the time to look through the student history records as part of the test and it was included in the time logged for completing the activity. This is a best practice, and while it takes more time, can provide much greater assurance as to the accuracy of the UIC.

School Year 2010-2011 Statewide UIC Statistics

The total number of records submitted and UIC matching statistics are provided for all collections in the MSDS for 2010-2011. This included the following student data collections:

- Fall General (fall membership count)
- Spring General (supplemental membership count)
- End of Year General
- Supplemental Nutrition Eligibility (SNE)
- Early Childhood
- Student Record Maintenance (SRM)



- Early Roster
- Request for UIC
- Special Education Child Count (3WiN)
- Teacher Student Data Link (including the TSDL extension collection) Analysis of

these collections resulted in the following statistics:

Table 2

2010-2011 School Year	Count (A)	Percentage (B)
Total Records submitted to MSDS (1)	8,641,083	100.0%
Total Records matched to UIC (2)	8,556,071	99.0%
Records requiring resolution (3)	18,016	0.2%
New UICs created by system (4)	53,206	0.6%
Mid-Year Enrollments (5)	120,748	1.4%

The numbers reported in the Table 2-columns A & B, row 5 represent the count of records showing new enrollments which were reported after the Fall 2010 General Collection. This was determined by identifying all records that were reported in the MSDS Spring 2011 and End of Year 2011 General Collections by districts that did not report them in the immediately preceding general collection. These may be the result of a student moving between public districts or newly enrolling in the public school system. In either case, the enrolling district will need to acquire a UIC for these students.

Time Estimates for Acquiring a UIC

The process of acquiring a UIC for a new student can occur in several scenarios. Our estimates combine the time averages detailed in Table 1 and the collection statistics shown in Table 2.

1. Obtaining a UIC for a student for whom there has not been a UIC assigned:

In this situation, the user may first perform a student search to determine that no UIC has been assigned and then request a UIC be created for the student. Assuming that all new UICs created by MSDS during the 2010-2011 school year were done following this process rather than the system automatically determining a new UIC is required, the following time estimate can be applied:

Table 3

2010-2011 School Year	Totals
New UICs generated: <i>Table 2-column A, row 4</i>	53,206
Time to search for and request UIC: <i>Table 1-column B, row 3 plus column C, row 3 (0.75+3.75)</i>	4.25 minutes
Total time (rounded up to the next hour):	3,769 hours

2. Obtaining a UIC when UIC resolution is required:

If when the user performed a student search the system returned multiple possible matches, the user would need to evaluate each possibility and determine if the student has already been assigned a UIC or if a new UIC must be requested. For this estimation we assume that after evaluating each possibility the user enters a request for a new UIC



and that all records which required UIC resolution during the 2010-2011 school year resulted in a request for a new UIC.

We recognize that time spent reviewing the MSDS records represents only a portion of the user's total time expenditure for this process. This timing does not take into account the effort expended outside of the MSDS doing research. This research entails comparing MSDS records to the local SIS, contacting other districts – the sending district to validate the UIC or student information, or potential match districts to determine if a student is a match – as well as researching information in the student's physical CA60. Because of the unknown variable when working with other districts to confirm information, we have applied a research factor multiplier of ten (10) to our time estimate for completing the MSDS portion of this task. Based on feedback from an experienced former district user, this is reasonable and generous multiplier.

Table 4

2010-2011 School Year	Totals
Records requiring resolution: <i>Table 2-column A, row 3</i>	18,016
MSDS time estimate for student search, UIC resolution and requesting a new UIC: <i>Table 1-column B, row 3 plus columns C & D, row 3 (0.75+3.75+1.5)</i>	6.00 minutes
Total estimated MSDS time: (rounded up to the next hour)	1,802 hours
Research factor:	x 10
Total Time Estimate:	18,020 hours

3. Obtaining a UIC for a student who enrolls mid-year:

A student mobility analysis was completed to determine the time expenditure for obtaining a UIC for a student who enrolls in the district mid-year. While the district may have submitted these records through the Request for UIC Collection (and hence would be already counted in the numbers represented previously), we have taken a conservative approach and assumed that for each newly enrolled student, the district conducted a student search manually in the MSDS and then manually added the UIC for the student to the district local student information system. Because of the great variety of local student information systems used by districts, we are assuming that the time to enter this information will be approximately the same as the time required by a novice user to complete a simple student search in MSDS (*Table 1-column A, row 2*).

Table 5

2010-2011 School Year	Totals
Mid-Year Enrollments: <i>Table 2-column A, row 5</i>	120,748
Time to search for an existing UIC: <i>Table 1-column B, row 3</i>	0.75 minutes
Time to manually enter into local SIS (student search): <i>Table 1-column A, row 3</i>	0.75 minutes
Total Time Estimate (rounded up to the next hour):	3,019 hours



4. Importing UIC data into the local student information system:

Once the district acquires the UIC for the student, the local student information system must be updated. This may be accomplished by one of the following methods:

- a. **Manual Input:** The district user may enter the UIC by hand into the local SIS
- b. **Data Import:** The local SIS may provide an option to import the file of new UICs into the local system.

To determine the total number of records that the district users may need to update within their local SIS, the Request for UIC and Early Roster Collections for the 2010- 2011 school year were analyzed providing the information shown in Table 6 and Table 7.

Table 6

2010-2011 Request for UIC Collection (A)	Count (B)	Percent (C)
Total Records Submitted (1)	148,315	100%
Total Records Resulting in UIC Match Found (2)	89,207	60.15%
Total Records Requiring Resolution (3)	6,311	4.26%
Total New UICs Created (4)	52,630	35.49%

Table 7

2010 Early Roster Collection (A)	Count (B)	Percent (C)
Total Records Submitted (1)	567,920	100%
Total Records Resulting in UIC Match Found (2)	561,511	98.87%
Total Records Requiring Resolution (3)	1,497	0.26%
Total New UICs Created (4)	4,893	0.86%

This data was combined with that shown in Table 2-column A, rows 3 and 4 to identify the records that must be entered into the local SIS in order to ensure the district's system contains the correct code for each student.

Table 8

2010-2011 Collection Source (A)	Count (B)
Request for UIC Matches Found (1) <i>Table 6-column B, row 2</i>	89,207
Early Roster Matches Found (2) <i>Table 7-column B, row 2</i>	561,511
Total Records Requiring Resolution (3) <i>Table 2-column A, row 3</i>	18,016
Total New UICs Created (4) <i>Table 2-column A, row 4</i>	53,206
Total Records Requiring SIS Update (5):	721,940

Option a: Manual Input

For the manual input option, we used the same timing as the student search based on the assumption that the user would have to input the student name to search for the record, and then copy and paste the UIC from the MSDS into the local SIS (approximating the effort to write the UIC as in scenarios 1-4). We are assuming that the time to manually enter the data is equivalent to the time required by a novice user to complete a simple student search in MSDS (*Table 1-column A, row 2*).

**Table 9**

2010-2011 School Year	Totals
Records Requiring Import: <i>Table 8-column A, row 5</i>	721,940
Manual Entry of UIC into the local SIS (simple student search): <i>Table 1-column A, row 2 rounded to the next quarter minute</i>	0.75 minutes
Total Time Estimate (rounded up to the next hour):	9,025 hours

Option b: Data Import

We consulted an experienced former local user who provided an estimate of three to five (3-5) minutes as the time needed to complete a file import to a local student information system. This includes the steps of logging into the MSDS, downloading the UIC file, saving it locally, logging into the local SIS, using the import function, and importing the file. For our time cost estimate, we will assume that each import will take the district user five minutes. We assumed that this step would need to occur for each collection and that the district would also submit a Request for UIC file prior to the six periodic collections (Fall General, Spring General, End of Year General, Early Childhood Fall, Early Childhood Spring and Early Childhood End of Program) and the Teacher Student Data Link collection.

Table 10

2010-2011 School Year	Totals
Number of imports annually:	14
Time to import the file:	5.0 minutes
Number of districts (ISD/LEA/PSA):	847
Total Time Estimate (rounded up to the next hour): [(14x5x847)/60]	989 hours

To provide the most generous time estimate, we will assume that districts employ the least efficient method (manual data entry) and use the calculations from Table 9 for cost estimation.

5. Time Estimates for Linking UICs

As part of managing UICs over time, districts often may need to link multiple UICs together for a student. This scenario may occur, especially with mobile students, when at some point the student was assigned a new UIC. This more frequently happened prior to the MSDS because districts could elect to simply create new UICs when records were in resolution. As the ability to accurately track a student's data longitudinally has become more critical to federal and state reporting, many districts are taking more time to look at multiple matches and submit records for linking when it is appropriate.

Both of the timing scenarios tested for requesting the linking of UICs included student search and review of student history data. The linking request log in MSDS does not identify requests which contained multiple links. Each discrete UIC to be linked is entered in the log as an individual request. Therefore, to again provide the most generous time allowance, we will assume that each logged request involved multiple UICs requiring approximately two and one-quarter minutes (2:15) to complete. The research factor has been applied to this calculation as this process may require the district user to complete limited off-line research. As detailed in the Acquiring UIC section of this document, research activities may include comparing MSDS records to the local SIS, contacting other districts to validate the UIC or student information, as well as researching information in the student's physical CA60.

**Table 11**

2010-2011 School Year	Totals
Linking requests:	5,331
Time estimate for requesting multiple UIC links: <i>Table 1-column F, row 3</i>	2.25 minutes
Research factor:	10 Multiplier
Total Time Estimate (rounded up to the next hour): [$((5,331 \times 2.25) \times 10) / 60$]	2,000 hours

Summary

The 2010 State Compensation Tables show that a Data Coding Operator-A8 (senior) employed by the State of Michigan would cost \$17.54 per hour (plus benefits cost). We have chosen to fund the work according to the Department of Technology, Management and Budget Advisory Memorandum Number 2012-1 using the cost of an Information Technology Programmer/Analyst-12 who would bill out at \$63.91 per hour. This amount includes an hourly rate, insurances, FICA and retirement costs. By applying this amount to the total preparation and data entry hours quantified in the study, an estimate can be calculated on the amount of funding necessary to support the acquisition and reporting of the state issued unique identification code (UIC) annually. The amount recommended for the 2011-12 school year is \$2,490,291 as detailed in Table 12.

Table 12

	Local Effort	Rate	Cost
Obtain UIC-New <i>Table 3</i>	3,769 hours	\$63.91	\$240,877
Obtain UIC-Resolution Required (includes research factor) <i>Table 4</i>	18,020 hours	\$63.91	\$1,151,659
Obtain UIC-New Enrollment <i>Table 5</i>	3,019 hours	\$63.91	\$192,945
Importing UIC to SIS (Option a: Manual Input) <i>Table 9</i>	9,025 hours	\$63.91	\$576,788
Linking Requests (includes research factor) <i>Table 11</i>	2,000 hours	\$63.91	\$127,820
Total UIC Management Cost Estimate			\$2,290,088

Detailed steps for UIC Timings

Testers were provided with printed student information to use during the timing. An observer timed each task using a stop watch. Testers were provided the following instructions:

Student Search: Timing starts at user log-in and ends when the tester has written the correct UIC beside the student name on the test data sheet.

Student Search -1: Less common name only

1. Enter a student name
2. Find the record for the student that was just entered
3. Print/copy UIC
4. Write correct UIC beside student name on the test data sheet



Student Search - 2: More common name with birth month and year

1. Enter a student name
2. Filter based on birth month
3. Filter based on birth year and month
4. Write correct UIC beside student name on the test data sheet

Requesting new UIC: Timing starts at user log-in and ends when the tester has written the correct UIC beside the student name on the test data sheet.

Request New UIC-no student found in lookup

1. Enter a student name
2. When no results are returned, click 'Add This Student'
3. Choose 'Request for UIC Collection' and add gender and submitting entity
4. Click 'Submit/Go To Details' and add School and Personal Demographics data
5. Click 'Submit'
6. Go to Request for UIC Collection in Data Staging Area for district and find the student's new UIC
7. Print/copy UIC
8. Write UIC beside student name on the test data sheet

Request New UIC-possible match(s) found in lookup

1. Enter a student name
2. When results are returned, click 'Student UIC'
3. Click 'View Student History'
4. Verify that none of the returned records belong to your student then go to the Request for UIC Collection in the Staging Area
5. Click 'Add Direct'
6. Enter last name, first name, date of birth and gender
7. Click 'Submit/Go To Details' and add School and Personal Demographics data
8. Click 'Submit'
9. Go to Request for UIC Collection in Data Staging Area for district and find the student's new UIC
10. Print/copy UIC
11. Write UIC beside student name on the test data sheet



Linking student records: Timing starts at user log-in and ends when the user submits the linking request.

Request to Link UICs:

1. Search for student records to be linked
2. Find two UICs; compare history to verify they are the same student
3. Copy the secondary UIC
4. Go to primary UIC, click on 'View Student History' and choose 'Request to Link'
5. Paste in secondary UIC, enter Justification and click 'Validate All'
6. Verify that correct UICs were submitted in linking request and click 'Submit Request'

Request to Link Multiple UICs:

1. (same steps as above)
2. Review student history for all student records to determine that they are the same student
3. Submit linking request for all UICs

UIC Resolution: Timing starts at user log-in and ends when the user clicks 'Use this UIC'.

UIC Resolution-1 student :

1. Navigate to Staging Area Details for the Request for UIC Collection for district
2. Filter records to limit list to students that require resolution
3. Click 'Requires Resolution' next to student name
4. Review student history to see which UIC, if any, are a match to the submitted student
5. Find match and click 'Use this UIC'



Registry of Educational Personnel Data Submission Time Study

Staff members from the Center for Educational Performance and Information completed a Data Submission Time Study for the Registry of Educational Personnel (REP) Online Data Submission for the purpose of determining the approximate length of time a qualified staff member would take to enter specific data elements for one record. The study was conducted October 12, 2011. Understanding that individuals work at varying levels of ability and system knowledge, the study also equated the actual time to complete the data submissions into an estimated overall average time for data submission.

The following assumptions were made regarding the individuals entering the data prior to the beginning of the time study:

1. Current authorized user of the REP Application.
2. Basic knowledge of the REP Application and its functionality.
3. Basic knowledge of the REP Data Field Descriptions
4. Basic knowledge of resource materials such as the following:
 - a. New to the REP (Guide for new authorized users of the REP)
 - b. REP User's Guide
 - c. REP Frequently Asked Questions
5. Access to all personnel data necessary for data submission including the preparation of those data.

Novice and intermediate users of the REP Application were timed while entering data records. Those timed have varying levels of data entry proficiency. The methodologies for completion of the tasks were established prior to commencing with data entry. Various types of record submissions were evaluated and timed. All participants were given the same directions and data elements for submission in to the REP database.

The following types of records were entered into the test site of the REP Application:

1. New Employee (Personnel Identification Code [PIC] is created when record is entered into the system for the first time.)
 - a. Includes vacant funded positions
2. Continuing employee record without updates (PIC automatically displays within record)
3. Continuing employee record with updates such as:
 - a. Change in assignment code
 - b. Change in grade setting
 - c. School/facility
4. Entering of one assignment with all required data elements in field 10 (School Assignment Data)



Supplementary Information Regarding Study

Part-Time Staff Members: Two groups of assignment codes were not included in the time study. These included staff members who do not work in a full-time capacity and therefore are allowed to be submitted in the REP with fewer data elements. These staff members include day-to-day substitute teachers, day-to-day substitute paraprofessionals/aides and non-instructional staff members with a full-time equivalency of less than 0.5. These records would take less time to enter into the database; nonetheless, the state is including these abbreviated records in the population of full records for data entry timing purposes.

Third-Party Vendors: Several districts use a third party vendor for hiring and assigning their day-to-day substitute teachers, day-to-day substitute paraprofessionals/aides and miscellaneous part-time non-instructional staff members. The vendor prepares an upload file for the districts to submit to CEPI of all the contracted employees assigned to the district. The district uploads the file as part of their REP submission. This study includes these records in the full costing model attributed to single submission data entry of a full record into the REP.

REP Bulk Upload Application: The REP Bulk Upload Application enables a district to upload a single file that would include all employees in one submission. While it is easier for a district to use a personnel software database for the bulk upload file preparation for the purpose of the time study and cost analysis, it is assumed that districts will use the manual online single record submission process to enter records. Using the manual online single submission process calculations for the study allocates a greater time allowance for the districts.

Employee Record Preparation: The time expended preparing the records for data entry was not included in the time study; however, data element coding preparation would be necessary for the district prior to data submission. This would include determining the correct REP assignment code for the position held by the employee as well as other required data elements codes such as credential type, Title I participation, employment status and educational settings. These times are estimated in the Cost Analysis section of this report.



Time Study Averages

The following chart provides the data entry completion times by user type and computation of the average times in minutes for completion of each task:

Table 1

Registry of Educational Personnel - Average Data Submission Times				
Participant Levels Average of All Participants by Category	New Record	Continuing Employee Record Without Modifications	Continuing Employee Record with Modifications	Additional Assignment (Field 10)
Novice REP User	3:14	0:29	0:46	1:38
Intermediate REP User	2:33	0:20	1:00	1:27
Average Times	2:54	0:25	0:53	1:33

Based upon the timed data entry, the following observations were made:

1. Updating an existing record with modifications such as a change in assignment, grade or educational setting takes approximately 53 seconds.
2. Entry of a new record with one assignment requires about 2 minutes and 54 seconds.
 - Entry of each additional assignment to a record would require approximately 1 minute and 33 seconds. (e.g., a new record with two assignments would require approximately 4 minutes and 27 seconds [2:54 plus 1:33])
3. Updating a record without any changes to the assignment data takes approximately 25 seconds.



State Submission Averages

The Fall 2010 and End-of-Year (EOY) 2011 REP Submissions were examined individually and the records were classified into categories based on the status of the staff members. These categories are Continuing Employee, New Employee to the District with a pre-existing Personnel Identification Code (PIC), New Employee without a pre-existing PIC, Terminated Record and Vacant Funded Position. The staff headcount and staff assignment counts are split into two categories:

New to District: These staff members, full and part-time, include those who were new to the district in the Fall 2010 REP submission. Vacant positions are also included.

Continuing Employees: These staff members, full and part-time, include those who were previously submitted in the REP and continued employment or were reported as terminated in the Fall 2010 REP submission.

Analysis for Fall 2010 Table 2

Type	Status	Staff Head Count	Assignments
New to District	New Employee to District	18,424	20,673
	New Employee (with a New PIC)	14,468	15,216
	Vacant Funded Position (new each submission)	52	57
Sub Total – New to District		32,944	35,946
Continuing Employees Records	Continuing Employee	265,578	310,469
	Terminated Record	61,934	67,313
Sub Total – Continuing Employees		327,512	377,782
Total		360,456	413,728

From the analysis of the Fall 2010 REP Collection Records, it is concluded that:

- 32,944 new records were added to the REP for the Fall Collection.
- 327,512 records were updated as continuing employee records.
- 111,995 of the 413,728 assignment records were either additional new assignments or required modification. (Note: This count includes 108,993 assignments modified or newly added assignments to continuing employees and 3,002 assignments that were additional assignments to new employees. See Table 3)



The following chart provides the time estimate for data submission at a statewide level for the school employee records as reported in the Fall 2010 REP data submission:

Table 3

Record Types	Staff Head Count (Table 2)	Time to Update (Table 1) (in minutes)	Total Time (in hours)
New to District	32,944	2:54	1,592.29 Continuing
Employee Records	327,512	0:53	4,821.70
Modified and Additional Assignment Records*	111,995	1:33	2,893.20
Total Hours for Fall 2010			9,307.20

*This count includes modified records (108,993) of continuing employees and assignments reported in addition to the initial assignment in new employee records (3,002) i.e. second and all subsequent assignments.

Analysis for EOY 2011

New to District: These staff members, full and part-time, include those who were new to the district in the EOY 2011 REP submission. Vacant positions are also included.

Continuing Employees: These staff members, full and part-time, include those who were previously submitted in the REP and continued employment or were reported as terminated in the EOY 2011 REP submission. Vacant-funded positions that were reported in the Fall 2010 REP submission are also included in this count.

Table 4

Type	Status	Staff Head Count	Assignments
New to District	New Employee to District	17,493	18,846
	New Employee (with a New PIC)	15,510	16,316
	Vacant Funded Position	82	87
Sub Total – New to District		33,085	34,829
Continuing Employees Records	Continuing Employee	273,373	323,536
	Terminated Record	47,303	50,869
Sub Total – Continuing Employees (includes Terminations)		320,696	374,405
Total Head Count and Assignments		353,781	409,234



From the analysis of the EOY 2011 REP Collection Records, it is concluded that:

- 33,085 new records were added to the REP for the EOY Collection.
- 320,696 records were updated with new employment information either with or without changes to the assignment records.
- 52,127 of the 409,234 continuing employee assignment records were modified in the EOY 2011 REP collection (Note: This count includes 50,383 assignments modified or newly added assignments to continuing employees and 1,744 assignments that were additional assignments to new employees. See Table 5).

The following chart provides the time estimate for data submission at a statewide level for the school employee records as reported in the EOY 2011 REP data submission:

Table 5

Record Types	Staff Head Count (Table 4)	Time to Update (Table 1) (in minutes)	Total Time (in hours)
New to District	33,085	2:54	1,599.11
Continuing Employee Records	320,696	0:53	4,721.36
Modified and Additional Assignment Records*	52,127	1:33	1,346.61
Total Hours for EOY 2011			7,667.08

*This count includes modified records (50,383) of continuing employees and assignments reported in addition to the initial assignment in new employee records (1,744) i.e. second and all subsequent assignments.

Statewide School Year 2010-2011 REP Submission Time Estimates

In conclusion, by combining the estimated 9,307.20 hours for data entry for the Fall 2010 REP collection with the estimated 7,667.08 hours for data entry for the EOY 2011 REP collection, a total estimate of 16,974.28 hours was likely necessary to submit REP data for the 2010-2011 school year if the REP Online Single Submission Application were used for data reporting.

Table 6

Record Types	Total Time (in hours)
Fall 2010 (Table 3)	9,307.20
EOY 2011 (Table 5)	7,667.08
Total Hours	16,974.28



Record Preparation Analysis

In addition to the time study that determined the estimated hours that were likely necessary to complete data entry of the REP data for the 2010-2011 school year, it is important to further estimate the time required for assignment analysis and preparation of records prior to data entry.

An assumption is made that each district is responsible for maintenance and update of their personnel data internally. However, in addition to the internal personnel maintenance at the district level, each record must be crosswalked to the coding required for data submission to the REP for each submission cycle. This would include a crosswalk of the locally identified assignments to the REP assignment codes as well as other data elements such as certificate types, employment status, and educational settings.

It is estimated that it would take approximately 15 minutes per year for preparation of each new and continuing employee record prior to submission to the REP. This allows for 7.5 minutes (8 records per hour) per record each submission cycle. Based on this estimate, the following will provide the total estimated preparation time for each new and continuing employee for the 2010-2011 school year.

Table 7

Submission Cycle	Staff Head Count	Estimated Preparation Time Per Record (7.5 minutes) Factor: $(7.5/60=.125)$	Hours to Prepare
Fall 2010 (Table 2)	360,456	.125	45,057.00
EOY 2011 (Table 4)	353,781	.125	44,222.63
Total Estimated Preparation Hours			89,279.63



Total Cost for data preparation and entry if completed by the State of Michigan

The 2011 State Compensation Tables show that a Data Coding Operator-A8 (senior) employed by the State of Michigan would cost \$17.54 per hour (plus benefits cost). We have chosen to fund the work according to the Department of Technology, Management and Budget Advisory Memorandum Number 2011-1 using the cost of an Information Technology Programmer/Analyst-A12 who would bill out at \$63.91 per hour. This amount includes an hourly rate, insurances, FICA and retirement costs. By applying this amount to the total preparation and data entry hours quantified in the study, an estimate can be calculated on the amount of funding necessary to support the reporting of school district staffing data annually. The amount recommended for the 2011-2012 school year is \$6,790,687.39 (calculated in Table 8).

Table 8

	Hours by Activity	Hourly Rate	Cost
Preparing Records for REP Submission (Table 7)	89,279.63	\$63.91	\$5,705,861.15
REP Data Entry for Fall 2010 and EOY 2011 (Table 6)	16,974.28	\$63.91	\$1,084,826.24
Total Estimated Preparation Time and Cost	106,253.91	\$63.91	\$6,790,687.39



Attachment E

**School Infrastructure Database (SID)
Data Submission Time Study**

Staff members from the Center for Educational Performance and Information completed a Data Submission Time Study for the School Infrastructure Database Online Data Submission for the purpose of determining the approximate length of time a qualified staff member would take to enter specific data elements for one school or facility. This study was conducted November 5, 2010. Understanding that individuals work with varying levels of ability and system knowledge, the study also equated the actual time to complete the data submissions into an estimated overall average time for data submission.

Prior to the beginning of the time study, the following assumptions were made regarding the individuals entering the data:

1. Current authorized user of the SID Application.
2. Basic knowledge of the SID Application and its functionality.
3. Basic knowledge of the SID Data Field Descriptions
4. Basic knowledge of resource materials such as the following:
 - a. New to the SID
 - b. SID User's Guide
 - c. SID Frequently Asked Questions
5. Access to individual school/facility crime and safety data necessary for data submission including the preparation of those data.

Novice, intermediate and experienced users of the SID Application were timed while entering data records. Those timed have varying levels of data entry proficiency. The methodologies for completion of the tasks were established prior to commencing with data entry. Various types of record submissions were evaluated and timed. All participants were given the same directions and data elements for submission to the SID database.

The following types of data were entered into the test site of the SID Application:

1. School Safety Plan Data
2. Aggregate totals of the various types of incidents
3. Aggregate totals of Dual Enrollment Data
4. Aggregate totals of Instructional Computers Available to Students



Supplementary Information Regarding Study

SID Bulk Upload Application: A SID Bulk Upload Application is available for districts to upload all school/facilities in one file. While use of the bulk upload process would streamline the data submission for a district, for the purposes of the time study and cost analysis, it is assumed that districts will use the online application single school/facility submission process to enter records. Using the manual online application calculations allocates a greater time allowance for the districts.

School/Facility Field Preparation: The time expended preparing the records for data entry was not included in the time study; however, worksheets are made available for districts to compile data on a monthly basis.

Work sheets Available to Districts: Excel worksheets are available for the district to compile and maintain data throughout the school year. At the end of the school year, the district can total each field's data and then submit the aggregate data to the SID.

Shared Physical Space: If an administrative unit shares physical space with another school/facility within the district, the district is not required to submit separate data for the administrative unit. The SID data for the administrative unit would be included in the school/facility with which it shares space.



Time Study Averages

The following chart provides the data entry completion times by user type and computes average times for completion of data submitted in the SID at the school/ facility level. The online submission application was used for data entry.

Table 1

School Infrastructure Database - Average Data Submission Times			
Study Participant - Online Submission	High School All Fields Submission	Elementary School All Fields Submission	Average Times
Novice SID User	02:47.8	02:49.2	2:48.5
Intermediate SID User	01:44.5	01:28.0	1:36.3
Experienced SID User	00:55.1	00:55.2	0:55.1
Average Time	01:49.1	01:44.1	1:47

Based upon the timed data entry, the following observations were made:

1. Updating all required fields for a school/facility's data takes approximately 1 minute 47 seconds.

State Submission Averages

Data from the End-of-Year (EOY) 2010 SID Data Submission were examined at the school/facility level. The data submitted reflects the 2009-2010 school year. Data are submitted by districts to the SID during an EOY submission. Districts submit data at the school/facility level regarding the school safety plan, crime incidents, dual enrollment and instructional computers available to students.

Analysis for School Year 2009-2010

Table 2

Total Districts	Total Schools/Facilities
848	5,063



Statewide School Year 2009-2010 SID Submission Time Estimates

In conclusion, by multiplying the total number of schools/facilities open (Table 2) during the 2009-2010 school year (5,063) by the estimated average time for data entry (Table 1) for each school/facility (1:47), a total estimate of 150 hours (Table 3) was likely necessary to submit SID data for the 2009-10 school year when using the SID Online Submission Application for data reporting.

Table 3

Schools/Facility 2009-2010 School Year	Average Time per School/Facility for Data Entry	Total Hours for Data Entry
5,063	1:47	150

Data Preparation Analysis

In addition to the time study that determined the estimated necessary hours to complete data entry for the SID Data for the 2009-2010 school year, it is important to estimate the time required data preparation of the school/facilities prior to data entry.

An assumption is made that each district is responsible for maintenance and update of the school safety data internally. However, in addition to the internal maintenance of the school safety data at the district level, the additional data elements required for each school/facility for submission is outlined in the SID Data Field Descriptions. Districts are required to report aggregate totals for specific data elements as outlined in the data field descriptions to meet state and federal reporting requirements concerning the school safety plan, crime incidents, dual enrollment and instructional computers available to students.

It is estimated that it would take approximately four hours per year per school/facility for preparation of the school/facility aggregates required for data submission. Based upon this estimate, the following will provide the total estimated preparation time for each school/facility for the 2009-2010 school year.

Table 4

School Year	School/ Facility Count	Estimated Preparation Time Per School/Facility	Hours to Prepare
2009-2010	5,063	4 hours	20,252
Total Estimated Preparation Hours			20,252



Total Cost for data preparation and entry if completed by the State of Michigan

The 2010 State Compensation Tables show that a Senior Data Coding Operator employed by the State of Michigan would cost \$17.54 per hour (plus benefits cost). We have chosen to fund the work according to the Department of Technology, Management and Budget Advisory Memorandum Number 2011-1 using the cost of an information technology programmer/analyst who would bill out at \$59.27 per hour. This amount includes an hourly rate, insurances, FICA and retirement costs. By applying this amount to the total preparation and data entry hours quantified in the study, an estimate can be calculated on the amount of funding necessary to support the reporting of school district crime and safety data annually. The amount recommended for the 2010-11 school year is \$1,209,226.50 (calculated in Table 5).

Table 5

State of Michigan Totals	Hours by Activity	Hourly Rate	Cost
Preparing Records for SID Submission (Table 4)	20,252	\$59.27	\$1,200,336.00
SID Data Entry EOY Submission (Table 3)	150	\$59.27	\$8,890.50
Total Estimated Preparation Time and Cost	20,402	\$59.27	\$1,209,226.50